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Pennsylvania Department of Labor and Industry

JOHN PRICE JACKSON
Commissioner

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SAFETY vs. LOSS

INDUSTRIAL ACCIDENTS IN PENNSYLVANIA DURING 1916 CAUSED INJURED WORKERS TO LOSE TIME EQUIVALENT TO 3,025,371 WORKING DAYS.

THE TOTAL AMOUNT OF WAGES LOST BY INJURED WORKERS AMOUNTED TO $7,535,059.

VOLUME IV—JUNE, 1917—NUMBER 6

HARRISBURG, PA.:
WM. STANLEY RAY, STATE PRINTER
1917.

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Bureau of Statistics and Information.
Bureau of Mediation and Arbitration.

Masonic Temple, ...Workmen's Compensation Bureau.
Industrial Board.
Division of Municipal Statistics.

Kunkel Building, ...Division of Industrial Hygiene and Engineering.

143 N. Fourth St., ...Bureau of Employment.

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PITTSBURGH, ...All offices of Department, including headquarters of Workmen's Compensation Referees, on the eighth floor Hartje Building.

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MONTHLY BULLETIN

OF THE

PENNSYLVANIA

Department of Labor and Industry

JOHN PRICE JACKSON, Commissioner

A BULLETIN OF INFORMATION FOR THE PUBLIC

JUNE, 1917.

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TABLE OF CONTENTS

	Page.
Clinic for the Study of Occupational Diseases Established by Co-operation of the University of Pennsylvania and Department of Labor and Industry. Report of Investigation of Health of Four Hundred Tobacco Workers. Occupational Disease Exhibit	5
"For the Convenience of Workmen and for Safeguarding Their Health,"	20
The Bureau of Inspection During April, 1917, in Addition to Making Inspections for Safeguarding Machinery, enforcing Women's and Child Labor Laws, Advanced Safety in Building Construction, in Boiler Operation and by Investigation of Accidents	22
Bureaus of Statistics and Information and Workmen's Compensation Show that 1,032 Workers Were Killed During the First Four Months of 1917 and 82,044 Other Workers Were Injured. During the Same Period Compensation Amounting to $1,529,932.55 has been Awarded to Dependents of Workers Killed and $816,159.01 has been Paid to Workers Disabled	34
Bureau of Statistics and Information Compiles Record of Industrial Accidents in Pennsylvania for the Year 1916 Showing 255,616 Accidents Reported, of Which 2,670 were Fatalities	35
Bureau of Mediation and Arbitration Settled Nine Strikes Involving 1,481 Employes During the Month of April, 1917	37
Work of the Bureau of Employment During April, 1917	39
The Location of Every Employment Agency Must Be Approved According to Law	44
The Electric Code of the Industrial Board	45
Industrial Board Distributes Warning Signs for Chemical Plants, Makes Additional Rulings and Approves Safety Devices	47
Social and Industrial Insurances as Discussed by Commissioner John Price Jackson Before Labor's Open Forum at Harrisburg, February 25, 1917	49
Proceedings of Industrial Physicians' Conference	53

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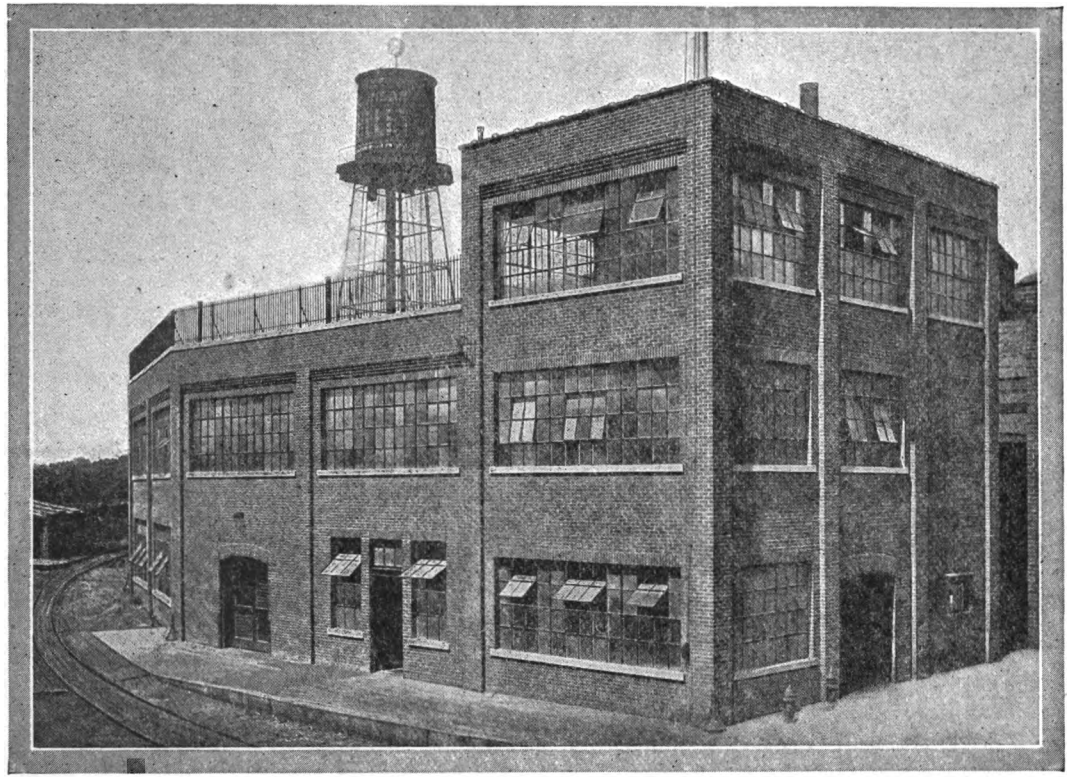

This building was erected to safeguard the health of the workmen of the American Pulley Company, Philadelphia. **See page 21.**

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CLINIC FOR THE STUDY OF OCCUPATIONAL DISEASES ESTABLISHED BY CO-OPERATION OF THE UNIVERSITY OF PENNSYLVANIA AND DEPARTMENT OF LABOR AND INDUSTRY. REPORT OF INVESTIGATION OF HEALTH OF FOUR HUNDRED TOBACCO WORKERS. OCCUPATIONAL DISEASE EXHIBIT.

Diseases peculiar to various occupations and industrial vocations, causes, effects and methods of prevention are being intensively studied at a clinic established at the University of Pennsylvania Hospital in Philadelphia through co-operative action of the University of Pennsylvania with the Pennsylvania Department of Labor and Industry.

This clinic, which is one of the first of its kind in this country, has already prepared a preliminary report of an investigation of four hundred workers from seven factories of the tobacco industry. The complete report is included in this article. An exhibit of models and photographs, dealing with occupational diseases, has been loaned to the clinic by the American Museum of Safety. This exhibit, which is the most complete collection in America upon the subject of occupational and vocational diseases, presents the chemical causes of trade diseases. bacterial causes of trade diseases and general causes of trade diseases as well as including many miscellaneous models under the general subject. An inventory of this exhibit is also included in this article.

Clinic Organized in November, 1916.

Announcement of the contemplated establishment of the clinic for the study of occupational diseases, in charge of Dr. Alfred Stengel, Professor of Medicine, of the University of Pennsylvania, was made at a conference of industrial physicians held at Harrisburg during 1916 by the Division of Hygiene and Engineering of the Department of Labor and Industry. This announcement was made as the result of conferences between Commissioner John Price Jackson of the Department of Labor and Industry, Dr. Francis D. Patterson, Chief of the Division of Hygiene and Engineering of the Department and Dr. Stengel of the University of Pennsylvania.

Organization of the clinic was effected in November, 1916. The Board of Managers of the University Hospital, having given their

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consent to the establishment of the clinic, arrangements were made that it might be conducted in Philadelphia,—the center of diversified industries,—through such co-operative action that it might accomplish the twofold purpose of scientific study of disease and, at the same time, be of great practical value to the Department of Labor and Industry of the Commonwealth.

Dr. T. Grier Miller was appointed chief of the clinic and he and Dr. Stengel were made deputy inspectors of the Department of Labor and Industry in order that they might have the power to conduct investigations in an official capacity. At present the activities of the clinic may be divided into three parts:—out-patient service, hospital service and special investigations.

The Out-Patient Service:—Dr. Miller attends the out-patient department at a fixed hour daily, and examines any patient referred to the occupational disease clinic from industrial plants, from other clinics of the University Hospital, or from any other hospitals when occupational disease is suspected or is present and requires further study. The number of cases referred to the clinic in this manner has not been large but is growing and will undoubtedly steadily increase.

Hospital Service:—Many cases coming before the Occupational Disease Clinic and requiring attention in the hospital are referred to the medical wards, and all clinical examinations or laboratory investigations, that may be required, are then made. A number of very interesting problems have been encountered in such cases. Among noteworthy instances of occupational diseases, so studied, are cases of pulmonary disease in miners, stone cutters and similar workers; a series of cases of lead poisoning; some cases of poisoning in connection with workers in powder mills and other chemical plants and a few cases of skin disease (from keratosis to carcinoma) in persons of various occupations involving contact with pitch, soot, heavy oils, etc.

Special Investigations:—Soon after the establishment of the clinic, and at the request of the Department of Labor and Industry, Dr. Miller began an investigation of tobacco workers. He completed this study and has referred his findings to the Industrial Board of this Department for its guidance in the matter of rulings to be made by the Board in connection with the tobacco industry. In this work Dr. Miller was assisted by Miss Keech a social worker, and, to a certain extent, particularly in the matter of hygienic conditions of the plant, by Dr. Smyth of the Division of Hygiene of the University of Pennnsylvania. Dr. Smyth acts as hygienist to the Occupational Disease Clinic. He has made studies of the dust and

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air in the plants under investigation and these studies will doubtless prove a valuable contribution to the work of the clinic.

Arranging For Studies of Textile Workers.

Arrangements have been made for another investigation of industrial workers on a larger scale in connection with the Public Health Department of the United States Government. A number of conferences have been held by the members of the clinic, officials of the Department of Labor and Industry at Harrisburg, and Dr. Schereschewsky of the United States Public Health Service; and work has been started on an investigation of textile workers. The first to be studied will be the silk industry. The study contemplated will be a comprehensive investigation of the hygienic, economic, sociological, as well as medical, aspects of the problem.

In connection with the Occupational Disease Clinic, a library and museum have been begun which it is hoped will prove of particular interest to other investigators who may wish to avail themselves of the facilities gathered together and also to the members of the clinic who will be engaged in the teaching of students. The rapid growth of interest in industrial diseases, with the acknowledged importance of this subject, makes it probable that medical schools will very soon introduce into their curricula adequate teaching of this branch of medical science, and it is intended by those conducting the clinic to organize this teaching so that a beginning can be made in the next collegiate term.

In addition to the direct study of cases of industrial disease and investigations of various industries, arrangements have been made with the directors of two of the more important scientific laboratories of the University of Pennsylvania to make provisions for any necessary scientific or experimental investigations in connection with the cases or problems that may arise.

Investigation of Tobacco Workers.

The preliminary report, made to the Industrial Board, of the investigation of the physical condition of four hundred workers in seven tobacco factories in Pennsylvania as conducted by Dr. T. Grier Miller, is presented in the following pages:—

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OCCUPATIONAL AND INDUSTRIAL CLINIC, HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, IN CO-OPERATION WITH PENNSYLVANIA DEPARTMENT OF LABOR AND INDUSTRY.

To the Industrial Board,
Department of Labor and Industry,
Commonwealth of Pennsylvania,
Harrisburg, Pa.

Gentlemen:

I wish to give you herewith a brief report upon some of the findings of the Occupational and Industrial Clinic of the University of Pennsylvania in its study of the tobacco industry in Philadelphia. I shall limit myself largely to those facts which I think may be of help to you in your decision upon the matter of children under 16 years of age being employed in the banding and packing departments of this industry. At the outset I will state that the number of children under 16 encountered in our study was so extremely small that the data we have upon them is of no value, and we shall have to be content with evidence gathered from a study of older workers in the banding and packing departments and comparisons of these with the general averages for the workers in other processes.

In a communication from Dr. Alfred Stengel last year I believe that you were given our review of the "literature upon the medical effects of the tobacco industry," and I shall here only recall to your attention that the writers are so divided in their opinions that no conclusions can be deduced, although there is evidently a tendency among the more recent ones to be less unfavorable to the tobacco industry.

This study has included 400 workers from 7 factories, whose total of employes is about 2,500. Of these, 302 were females and 98 males. Of the males, 57 were cigar makers, 18 packers, 14 dryers, and 9 casers; of the females, 157 were cigar makers, 73 packers, 51 strippers, and 21 banders. There were thus 91 packers and 21 banders examined, 38% of the total. The male packers had been in the industry for an average of 14.6 years and in the immediate factory for 5.2 years,whereas the averages for all the males were 14.81 and 5.3 years. The female packers had been in the business on the average of 4.4 years, the banders 5.1 years, and in the immediate factory 3.4 years and 3. years, while the general averages for the females were 6.3 and 2.8 years. These figures for the length of time in the immediate factory are interesting in view of the fact that many, even some of the employers we encountered, claim that these workers are not steady.

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As to the nativity of these people, we found that 222 or .55.5% were born in the United States, whereas only 99 had native born fathers and 106 native born mothers. Forty-eight were born in Russia, 45 in Austria-Hungary, 23 in Italy, 20 in Germany, and lesser numbers in Poland, the West Indies, England, Holland, and Rumania. Germany stood third in frequency of nativity of the parents, Austria-Hungary and Italy following. Of the packers and banders, 78% were native born.

As to ages, we had among our 400 only 3 who were under 16 and these were female packers; and there were only 5 under 16 years in the 7 factories in which our work was done. There were 53.5% of the total number betwen 16 and 24 years of age and 62% of the packers and banders were in this age group, and of these 90% were female. All but one of the female packers and banders were under 40 years of age.

Of the male packers, 55½% were married; of the females only 17.8%, and of the banders 28.5%; whereas of the total 39.5% were or had been married.

In regard to religion, 45.2% of the 400 were Catholic, 28% Protestant, and 24% Jewish. Of the male packers 78% were Protestant, and of the female packers and the banders 53% were Catholic.

In view of the numerous statements in the literature that the menstruation of tobacco working women was frequently disturbed, we paid particular attention to the history of this function. Among 296 women we found that 232,—78.4%, gave entirely negative histories in this respect, that only 14.2% had dysmenorrhea, and 5.7% irregularities. This is an extremely small percentage of disturbance, being about what would be expected among women in general. Of the 94 banders and packers, 78.6% were negative, showing them to be quite as normal as the workers in other processes, and this in spite of the fact that the packers have to stand at their work.

It has been claimed that tobacco has an inhibitory influence on birth rate and Emerson and Tracy (Reports of the Health Dept. of N. Y. City, 1874, 649) say that in one group of 58 families only 66 children were found and in another group of 53 families 95 were found. Of the 93 married women whom we encountered we got a history of 43 (46.2%) who had had no offspring, and to the other 50 only 93 children had been born, an average of only 1.9 to each mother and one to each married women.

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TABLE I.—Average Measures of 400 Cigar Workers.

	Males.					Females.				
	Cigar makers.	Packers.	Dryers.	Casers.	General average.	Cigar makers.	Packers.	Strippers.	Banders.	General average.
Weight, in kilog., ...	62.4	64.9	64.1	67.1	63.5	58.1	54.8	60.8	56.6	57.6
Height, in cms., ...	169.6	169.1	169.	166.	169.3	160.6	162.7	161.1	159.3	161.2
Breadth shoulders, in cms.,	38.2	39.2	39.1	39.6	38.7	36.2	35.9	36.9	36.1	36.2
Breadth chest, in cms., ...	26.5	26.9	27.3	28.3	26.9	25.3	24.6	24.3	25.5	25.
Breadth waist, in cms., ...	25.4	25.8	27.2	28.2	26.	22.3	21.6	22.8	22.	22.2
Breadth hips, in cms., ...	32.1	32.1	33.8	33.7	32.5	34.1	33.3	34.	33.	33.8
Depth chest, in cms., ...	19.4	19.4	21.7	20.9	20.	18.3	18.5	17.2	18.8	18.2
Depth abdomen, in cms., ..	19.1	19.8	22.	20.5	19.9	18.	18.2	18.1	18.5	18.1
Girth neck, in cms., ...	35.1	35.2	34.9	35.7	35.2	31.7	31.1	32.	31.2	31.6
Girth chest, in cms., { con.	84.8	85.1	89.5	91.7	86.1	80.8	79.4	80.8	82.7	80.6
Girth chest, in cms., { exp.	91.2	92.	94.6	97.	92.4	85.8	85.5	87.3	87.3	86.1
Girth waist, in cms., ...	77.7	79.3	83.6	93.5	79.3	70.3	69.2	75.2	70.	70.9
Girth hips, in cms., ...	92.3	94.2	98.9	96.6	93.9	97.5	96.1	102.6	97.	97.7

The past medical and surgical history of these workers revealed nothing significant, the usual diseases of childhood and early life appearing in the usual frequency and about equally distributed among the workers in all the processes.

An anthropometric study of these groups of workers has shown no essential variation from the general averages among the packers and banders. Reference to the appended table (1) and chart will make this clear and will at the same time emphasize the low stature, the narrow shoulders, the increased depth and girth of the waist, and the impaired chest expansion of the men.

The drops in the female curves for weight, shoulder breadth, breadth of waist and chest, chest depth, and girths of neck and waist, and the heighth of the hip breadth and girth curves are more apparent than real, since this chart was designed for men only, it serves, however, to show the close resemblance of the measurements of the packers with the general average.

Although statements as to build, posture, nutrition, and development are relative matters and influenced by the personal element of the examiner the following table may have some value:

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	Build.		Posture.		Nutrition.		Development.	
	Total.	Banders, packers.	Total.	Banders, packers.	Total.	Banders, packers.	Total.	Banders, packers.
Good,	235	70	266	79	255	72	238	64
Fair,	152	37	92	26	117	35	138	36
Poor,	10	4	40	7	27	5	16	6
Not stated,	3	1	2	1	1	0	8	6
Total,	400	112	400	112	400	112	400	112

I am including in this report also a table (Table 2) of my physical findings in these workers, by means of which comparisons may be made between the several groups and the totals for the males and the females and the two combined.

TABLE 2.—Physical Findings in 400 Tobacco Workers.

	Males.							Females.				
	Total.	Per cent.	Cigar makers.	Packers.	Dryers.	Casers.	Total.	Cigar makers.	Packers.	Strippers.	Banders.	Total.
Conjunctival congestion,	234	58.5	34	13	9	7	63	73	49	33	16	171
Dental caries,	157	39.2	19	7	13	7	46	52	28	23	8	111
Tremor of eye lids,	152	38.	10	6	1	3	20	64	40	22	66	132
Glands:												
Axillary,	129	32.2	29	13	8	5	55	50	17	2	5	74
Cervical,	79	19.7	16	7	6	3	32	21	20	5	1	47
Epitroch,	41	10.2	19	7	6	5	37	2	1	0	1	4
Pharyngeal congestion,	88	22.	20	9	10	3	42	22	8	16	0	46
Tonsils:												
Diseased,	57	14.2	6	2	2	0	10	28	7	8	4	47
Enlarged,	53	13.2	3	1	1	1	6	34	7	4	2	47
Hyperactive reflexes,	47	11.7	3	0	0	0	3	12	24	6	2	44
Lungs:												
slight rt. apical infiltration,	46	11.5	6	3	3	0	12	13	12	6	3	34
slight lt. apical infiltration,	9	2.2	2	1	0	0	3	2	2	1	1	6
definite apical infiltration,	6	1.5	1	1	1	0	3	2	0	1	0	3
emphysema,	6	1.5	3	0	2	0	5	1	0	0	0	1
general fibrosis,	5	1.2	2	1	0	2	5	....	....	....	....	....
Total numbers,	400	...	57	18	14	9	98	157	73	51	21	302
Thyroid fulness,	23	5.7	....	....	....	....	....	9	9	2	3	23
Heart: mitral systolic murmur,	20	5.	0	0	4	2	6	4	7	1	2	14
weak myocardium,	11	2.7	6	1	0	0	7	2	0	0	2	4
arhythmia,	6	1.5	....	....	....	....	....	1	3	2	0	6
pulmonic systolic murmur,	5	1.2	....	....	....	....	....	0	3	2	0	5
mitral presystolic murmur,	3	0.7	....	....	....	....	....	1	0	2	0	3
aortic systolic murmur,	1	0.2	....	....	....	....	....	0	0	0	1	1
Arteriosclerosis, fairly marked,	10	2.5	6	1	3	0	10	....	....	....	....	....
Pyorrhea,	45	11.2	8	6	10	2	26	14	0	4	1	19
Wearing of teeth,	110	27.5	28	3	4	3	38	64	0	8	0	72
Insufficiency of teeth,	71	17.7	9	5	7	5	26	18	16	8	3	45
Total numbers,	400	....	57	18	14	9	98	157	73	51	21	302

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Blood Pressure Studies.

Number studied, ...	30	14	11	9	64	78	33	27	9	147
Systolic pressure, average,.	124	130	130	131	126	118	121	127	127	121
Diastolic pressure, average,	80	82	80	73	81	78	82	85	74	81

I would call especial attention to the frequency of conjunctival congestion, wearing of the teeth, and pharyngeal congestion. The congestions of the conjunctives and the throat are distinctly abnormal and are unquestionably, in some measure at least, due to the dust and fumes of the tobacco. This is probably not the whole explanation, however, because 70% of the packers and banders show this phenomenon, whereas only 50% of the cigarmakers do; and the latter, as I shall show presently, work in a much more dusty and ammoniacal atmosphere. Furthermore, the packers are forced to use their eyes quickly and very accurately in selecting and grouping the various colors of cigars. If a refractive error is present and uncorrected it will almost certainly bring about hyperemia under the stress of such work. There are also the questions of temperature, moisture, and air movement to be considered as predisposing causes. We are now pursuing studies along these lines, and will comment further upon this in the present report.

The pharyngeal congestion on the other hand, which averages for all the workers 22%, shows only 15% among the packers and banders, the more dusty processes presenting the highest figures. It would seem that there might be more reason for attributing this condition to the dust itself, although a low relative humidity, which we have been able to demonstrate in many of these rooms, is not to be overlooked in this connection.

The wearing of the teeth is a pathological finding definitely incident to the industry as we have found it. It will be observed that there is none of this among the female packers and banders, and only in three instances among the male packers. It is present, however, in 43% of the cigarmakers. It consists in a gradual wearing down of the biting and grinding surfaces of the teeth until in some old workers the fattened and smoothed approximating surfaces are on a level with the gum margins. All intermediate stages may be seen, depending upon the number of years of work and the frequency of the habit, still quite common in the factories thus far visited, of biting out the ends of the cigars. In so doing the gritty material of the tobacco, as well as the plant itself, gets into the mouth and acts like emery dust in slowly grinding down the dental surfaces. This same condition may be seen in persistent tobacco chewers, but there it is generally seen only in old men whereas among cigar-

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makers, young girls after only a few years' work will present the phenomenon in well marked form.

Caries of the teeth was found in 39.2% of all the tobacco workers included in this study. Among the banders and packers the percentage was 49, yet these groups handle only the whole cigar and have no opportunity of getting the cigar in the mouth. This might suggest the idea, frequently stated by employers and superintendents, that tobacco acts as an antiseptic; but since we have found bacteria growing abundantly in our cultures from the atmosphere of tobacco rooms we are not inclined to favor this view. We have no explanation to offer, but believe the seemingly high percentage among all these workers not greater than would be found among these people generally, no matter what the occupation.

By insufficiency of the teeth I refer in this report to those having five or more teeth missing, having taken this as an arbitary standard. It is surprising that the percentage is so large as 17.7% when it is remembered that a very large part of these people are under 35 years of age. It is, however, in keeping with the amount of caries found and with the fact that when people of this class have a toothache they are much more likely to have the tooth extracted than to have it properly treated.

I will not take up other findings in detail because I do not believe that they have important relations to the question in hand, except those related to the lungs. My figures for slight apical infiltration, 13.7%, should not be taken as synonomous with tuberculosis. Some of these cases may be tuberculous, but I have not been able to prove any one of them to be. I have included five of them in my table of diagnoses as suspicious. None of these five had any sputum for examination and in no case could I get a chest X-ray, but their symptoms were quite in keeping with very early pulmonary tuberculosis. The others in this group had only vague physical signs without any other thing to suggest active trouble of any kind. Some may have old tubercular lesions of small extent and now definitely walled off and of no significance, while in other instances the infiltration may be only an exaggerated normal condition, or it is still possible that it may be due to some other cause. In six instances the apical signs were so definite as to justify us in concluding that they indicated old tubercular lesions which were at the time of examination entirely quiescent. The packers and banders showed their proportionate number of these pulmonary cases, 14.3% against 15.2%.

The blood pressure studies, also shown in table 2, reveal a normal average in each instance. There is some reference in the Italian literature to a rise of blood pressure among tobacco workers, but this study does not bear that out.

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Table 3 gives a summary, in the order of frequency, of the diagnoses entered upon our history cards for these workers. Some of them, such as headache, backache, constipation, etc., are only symptoms, and they are given only where in our limited study of each individual it was impossible to get at the etiological diagnosis. More exhaustive study should eliminate all these diagnoses.

TABLE 3.—Diagnoses of 400 Tobacco Workers in the Order of Their Frequency.

	Total.	Per cent.	Cigar makers.	Packers.	Dryers.	Casers.	Cigar makers.	Packers.	Strippers.	Banders.
Constipation,	77	19.2	5	.....	1	2	49	11	8	1
Normal,	49	12.2	7	3	0	1	14	12	11	1
Headache,	45	11.2	4	0	1	0	21	4	4	11
Gastric neurosis,	23	7.	2	0	2	2	13	3	1	0
Neurasthenia,	17	4.2	2	1	.....	.....	11	2	1	.....
Hypertension, slight,	12	3.	.....	1	.....	.....	1	6	3	1
Pelvic inflamation,	12	3.	.....	.....	.....	.....	5	3	4	0
Secondary anemia,	10	2.5	.....	.....	.....	.....	6	1	3	0
Backache,	6	1.5	2	0	0	0	2	0	0	2
Conjunctivitis,	6	1.5	0	0	1	0	3	0	0	2
Inactive pulmonary tuberculosis,	6	1.5	1	1	1	0	2	0	1	0
Questionable active tuberculosis,	5	1.2	1	0	0	0	2	2	0	0
Vasomotor neurosis,	5	1.2	1	1	0	0	3	0	0	0
Chronic appendicitis,	4	1.	0	0	0	1	2	1	0	0
Chronic bronchitis,	4	1.	3	0	0	0	0	0	1	0
Eczema (2 on hands, 1 on abdomen),	4	1.0	1	0	0	0	3	0	0	0
Pregnancy,	5	0.7	.....	.....	.....	.....	2	1	0	0
Toxic goitre,	3	0.7	.....	.....	.....	.....	3	0	0	0
Early nephritis (?),	3	0.7	.....	.....	.....	.....	1	1	0	1
Brachial neuritis,	3	0.7	1	0	0	0	2	0	0	0
Acne vulgaris,	3	0.7	1	0	0	0	1	0	1	0
Blepharitis,	2	0.5	1	0	0	0	1	0	0	0
Bursa on left wrist,	2	0.5	.....	.....	.....	.....	2	0	0	0
Furunculosis,	2	0.5	0	0	11	0	1	0	0	0
Gastro-duodenal ulcer,	2	0.5	2	0	0	0	.....	.....	.....	.....
Bronchial asthma,	2	0.5	1	0	0	0	0	1	0	0
Cirrhosis of liver,	2	0.5	2	0	0	0	0	0	0	0
Saero-iliac strain,	2	0.5	1	0	0	0	0	0	1	0
Urethral stricture,	2	0.5	2	0	0	0	.....	.....	.....	.....
Intestinal adhesions,	1	0.2	.....	.....	.....	.....	1	.....	.....	.....
Toxic arthritis,	1	0.2	.....	.....	.....	.....	.....	1	.....	.....
Cholelithiasis,	1	0.2	.....	.....	.....	.....	1	.....	.....	.....
Epididymitis,	1	0.2	1	.....	.....	.....	.....	.....	.....	.....
Cholazion, internal strabismus, and cerneal scar,	*									
Angina pectoris,	1	0.2	1	.....	.....	.....	.....	.....	.....	.....
Hysteria,	1	0.2	.....	.....	.....	.....	.....	.....	1	.....
Frontal sinusitis,	1	0.2	.....	.....	.....	.....	.....	.....	.....	.....
Undescended testicle, varicocele, and systitis,	*									
Tracoma,	1	0.2	.....	1	.....	.....	.....	.....	.....	.....
Paresis of right external rectus,	1	0.2	.....	.....	.....	.....	1	.....	.....	.....

*One each.

It will be noted that constipation is the most frequent diagnosis. This can be largely explained by the fact that the employes work in a sitting posture, with the exception of the dryers and the packers, and that they do not make use of their time off work to get a proper amount of exercise. We have no figures upon this, but the

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impression is well founded upon innumerable statements by them. It was only in the rarest instances we found a worker who took any exercise aside from a little walking and some dancing. When they live comparatively close to their work they are still likely to take the trolley rather than walk. Another factor is the poor selection of their food. This our Social Service Worker has thought particularly noticeable among the Polish girls. The packers and banders suffer less in regard to constipation, 10.7% against a general average of 19.2% and against 25% for the cigarmakers. This may be explained by their standing at work and by their shorter hours, thus allowing them more time in the daylight for out door activities.

There were only 49,—12.2%, out of the 400 workers in whom a diagnosis of normal could be made. It should be explained that none with dental caries, insufficiency of teeth, diseased tonsils, or other like things was considered to be normal.

We have no explanation for the number of headaches, 11.2%, but suspect that a regulation of the factories with regard to temperature, moisture, and air movement would dissipate most of them. Others no doubt are dependent upon eye strain, and in support of this quite a number of girls told us of their headaches disappearing when they had their eyes refracted and glassed.

Similarly we believe that many of the gastric neuroses, nautasthenias, etc., may be aborted by regulations of the hygiene of the factories. Among the gastric neuroses I have included all those forms of indigestion for which I did not believe there was an organic cause. In view of this I feel that 7% is quite low, and that it distinctly opposes the idea advanced in the literature that tobacco in itself causes gastric troubles.

Eczema upon the hands of cigarmakers has been described and the two instances of this condition which we present are probably of this etiology. Also the three cases of brachial neuritis are interesting, and three similar cases were reported in the state of Massachusetts last year. These are suggestive of a strained position at work or they may be dependent upon some toxic absorption. They should be studied more closely. It will be noted that neither of these conditions manifested itself among the banders or packers.

Two cases of left wrist bursa are included in our tables and two other cases were seen. They were all in female cigarmakers. It seemed likely that these girls did not make their cigars in the proper manner, but a careful observation of them when they were unaware did not confirm this suspicion.

Backache was to be expected in some of the packers from their constant standing, but was not found. One bander did have what appeared to be a sacro-iliac strain.

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This study of 400 tobacco workers has shown, then, no physical effects, aside possibly from two cases of eczema and three of brachial neuritis and some influence in the production of conjunctival and pharyngeal congestion, which are not common to this number of women generally or are explicable on the basis of faulty hygiene of the factories, correctable working habits, or inefficient personal hygiene.

In view of these general conclusions it seemed desirable to study further these additional factors, and Dr. Henry F. Smyth, now of our Clinic, and I have taken up a study of the hygiene of the factories. Although our work is only begun, and conclusions should not be drawn from our, as yet very limited results, I think you will be interested in the following tables:

Room.	Individual Determinations of Dust Particles per Cubic Foot.	Average.
Banding,	37,600— 23,400	30,500
Stripping,	44,200— 81,000	62,600
Packing,	29,600—104,400—84,000—52,400	67,600
Drying,	136,800	136,800
Casing,	164,200	164,200
Cigar making,	304,400—131,600	218,000
Stock,	123,400—346,600	235,000

These dust determinations have been made by means of a dust collecting apparatus recently perfected by the New York State Ventilation Commission. The dust from 200 cu. ft. of air is collected at the respiration level and the number of particles estimated per cubic foot. It will be seen that the banding room had the lowest number of particles and the packing room was next in order with the exception of the stripping room.

We have also made a few determinations of the ammonia content of some of the rooms, and have found the banding room lowest and the packing room in an intermediate position. Further determinations may alter these positions. The banding room averaged 3.7 mg. per cubic meter of air, the packing room 7.4 mg., and the stock room 10.5 mg. We are studying the nicotine content also.

We have found as yet no temperature below 75 F. and the relative moisture has ranged between 45 and 50%. The tobacco men are extremely anxious to keep the air moist and have installed in many rooms humidors. In spite of this we have found the rooms too dry, and curiously enough they could increase their relative humidity by reducing the temperature and at the same time make their rooms much more desirable to the occupants from both points of view. Also there is too much stagnation of air. Some employes complain

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of the humidors, but in view of our low readings for relative moisture, we are inclined to think that it is the stagnation of the air rather than the excessive moisture that is giving rise to these complaints. Ventilation is poor generally; the windows are almost constantly closed and the cracks are frequently stuffed with old rags and paper. The light is fairly good throughout. The packers use only natural light, and for this reason they cannot work in the late afternoons and when for other reasons the light is poor.

These facts regarding the hygiene of the factories are in keeping with our explantion of some of the diseased conditions found. I think that if we could study the personal hygiene of the workers in as thorough a way (and we have some facts of this nature which we are not attempting to present herein) we would find there a second important factor in the production of disease. Finally, the habit of the cigarmakers in "biting out" the ends of the cigars is not only objectionable on account of the possibility of disease transmission but also because it is uncleanly and produces an abnormal condition (dental wearing) in the workers themselves. With these three factors eliminated we believe the cigar industry to be devoid of any serious detrimental influences upon the health of the workers, and we believe this to be especially true in the banding and packing departments. The banders have the distinct advantage of working in the cleanest rooms. The packers are favored by the shorter hours, their good wages, and to some extent by their standing position (thus decreasing the chances of constipation). Both groups work with made cigars and so have no opportunity of getting the tobacco into the mouth and stomach.

If these statements will hold for workers over 16 years of age we see no reason why they should not for those under 16 as well; and we think that your decision to allow or not to allow the latter to work in the cigar industry should depend upon these considerations which determine for you whether or not children should take up any occupation before that age.

Very respectfully submitted,

(Signed) GRIER MILLER.

1805 Pine St., Philadelphia.
March 3rd, 1917.

Museum of Occupational Disease Clinic.

The American Museum of Safety of New York City, at the request of Dr. Francis D. Patterson, Chief of the Division of Hygiene and Engineering of the Department of Labor and Industry, placed at the disposal of the Occupational Disease Clinic of the University of Pennsylvania an exhibit of models and photographs covering the

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subject of occupational diseases. This exhibit comprises the most complete collection of such data in America.

While it is divided into four general groups covering chemical, bacterial and general causes of trade diseases and miscellaneous models there are also more than one hundred and fifty bottles to supplement the chemical group, containing various chemicals which are recognized as presenting hazards through their use. Descriptive charts accompany this supplementary material. Supplementing the entire exhibit are bottles containing metallic, vegetable, mineral, animal and mixed fibre dusts with microscopic photographs of these materials. The entire exhibit is as comprehensive as it is possible to make it and covers, in great detail, the broad subject of occupational diseases.

A detailed list of the materials loaned by the American Museum of Safety for exhibit at the clinic is as follows:—

Chemical Causes of Trade Diseases:—

Eczema from alcohol—Furniture polisher
Eczema from tar—Roofer.
Eczema from bronze—Bronze worker.
Dry eczema—Lacquer worker.
Eczema from formalin—Laboratory worker.
Model of acid burn.
Gangrene from carbolic acid—Laboratory worker.
Burn from hydrochloric acid—Laboratory worker.
2—Models of acid burn—Platinoxyd—Factory worker.
Acid burn—Second and third degree—Due to explosion.
Tar acne—Tar worker.
Chlorine acne—Chlorine worker.
Silver staining—Silver polisher.
Stomatitis mercurialis—Felt hat worker.
4 Jaw bones—Phosphorus necrosis—Match worker.
2 Casts lead paralysis—Lead worker.
Quicksilver erythema—Chemical worker.
Nickel itch—Nickel polisher.
Bakers' itch.
Spleen poisoning from aniline (actual specimen).
Kidney poisoning from aniline (actual specimen).
Liver poisoning from aniline (actual specimen).
Lung poisoning from aniline (actual specimen).

Bacterial Causes of Trade Diseases:—

Anthrax carbunkle—Tanner.
Anthrax intestine—Tanner.
Anthrax—Tanner.
Glanders—Hostler.
Deep ringworm—Wool sorter.
Syphilis—Primary stage.
Syphilis—Primary stage—Glass blower.
Syphilis—Primary stage—Barber.
3—Models of tubercular warts of the skin.

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Ringworm of the hand—Barber.
Actinomykosis—Farmer.
Blood Poisoning from unclean wound.

General Causes of Trade Diseases:—
Roentgen burn.
Actual specimen of normal lung.
Actual specimen of city dwellers' lung.
Actual specimen of coal miners' lung.
Actual specimen of stone cutters' lung.
2—Models of coal miners' lung.
1—Model of iron workers' lung.
1—Model of coal handlers' hand.
1—Model of miners' hand.
1—Model of stone breakers' lung.
Injury to eye from foreign body.
Abscess between fingers.
Milkers' callous.
Gout—Hand.
Varicose veins.

Miscellaneous:—
150 bottles containing metallic, vegetable, mineral and animal and mixed fibre dusts.
150 Microscopic photographs of above dusts.
150 bottles containing chemicals likely to give rise to some occupational disease. Descriptive cards for same.
Chart of industrial poisons.
Chart of harmful dusts prepared by Dr. F. I. Hoffman.

Clinic for Public Service.

The Occupational and Industrial Disease Clinic was established at the University Hospital to be of maximum service to the public. Any employe believing that he is suffering from disease peculiar to his work will receive attention without cost by presenting himself at the clinic. Employers and employes are urged to avail themselves of the exceptional facilities offered by this new activity for investigation of trade diseases.

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"FOR THE CONVENIENCE OF WORKMEN AND FOR SAFEGUARDING THEIR HEALTH."

From time immemorial there has always been a difference of opinion as to whether or not man is influenced more by heredity or environment, but there seems however, to be a generally accepted opinion that environment has much to do in influencing a person's health, contentment and happiness. So much so is this idea prevailing among all progressive employers today that they are doing everything they can find advisable to do to make the conditions under which their employes work most agreeable. Not only is it a matter of pride to have ideal conditions but it is also one of humanity and one of efficiency.

If it is necessary for a person to spend one-third of his life in a certain room or certain building it should most surely be a place which would be healthful. If this place should happen to be the work room it most certainly should be true in this case, for how could a person be expected to give the best that is in him if his surroundings are unhealthful or are such as to make him uncomfortable or ill at ease.

Sufficient well directed light, fresh air and good drinking water are absolute essentials, as are also sanitary conditions. A large number of factory managements go still farther and have installed rest and recreation periods, lunch rooms, landscape gardening around the factory buildings, athletic contests, picnics or excursions and many more innovations. Such things improve conditions, increase the cordiality between employer and employe and, if they are given in connection with sufficient wages, will make contented workers and establish an esprit de corps which is invaluable.

Some people look at these things very skeptically and say with a knowing shake of their head, "Oh! what's the use? It isn't appreciated." If they will take the trouble to go to such managements and ask them if they are worth while they will invariably be told that it has been found most advantageous to do such things. The only possible exception to the rule is a management who has taken up such things in a half hearted manner and naturally if they do not display much interest in it, neither will the employes. This has been very well illustrated in the case of safety work. Some managements employ safety men and apparently are spending large sums of money in the promotion of safety. The safety men are exceedingly loyal in their work but don't receive the moral support of the men higher up. When they hold safety meetings the latter

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This is the entrance to the building erected for the convenience and health of the employes of the American Pulley Company, Philadelphia.

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are conspicuous by their absence. How can employes be expected to take an interest in such meetings if the head officials do not?

It is very easy to determine the attitude of a management on affairs of this kind. If the yards or workrooms of the plant are littered or scattered over with waste material, or if material is allowed to lie around in a haphazard manner without any semblance of order one can feel sure that while there may be a pretense of being interested in the health and safety of the employes yet the fundamental principals are being neglected.

On the other hand where everything is in good order and sanitary conditions prevail the psychological effect of such conditions cannot help but make the workman believe that the company is interested in his own personal welfare and he cannot help but respond to this kind of treatment.

Recently the American Pulley Company of Philadlphia has opened for use a new building designed for the comfort and convenience; and for safeguarding the health of the men employed in the works. It occupies a central position and is easily reached from the entrance to the works used by the factory hands.

The building is 100 feet in length, 36 feet wide at the front end for 60 feet back, after which one side wall tapers so as to leave a width of 21 feet at the rear end. The whole structure is of brick and concrete with metal window frames and sash, there being no combustible material used. The building stands by itself, so that light and air enter from all sides. Besides the first and second floors there is a roofed over space 36 feet by 20 feet at the front end, making a third floor room for bad weather use. West of this room, or to the rear, there is a flat roof with parapet and railing where men can sit in good weather during the luncheon hour.

On the first floor there is the health officer's room where his records are kept and reports prepared. This is also a waiting room for men to be examined. They pass to a dressing room and shower bath and thence to the examination and first aid room which is long enough to permit a proper examination of the eyes. All men taken on are examined by a physician in attendance before employment.

On the same floor, but approached from a different entrance are the water closets and urinals. The floors are of the Terraza type and are well drained for convenience in hosing down. An opportunity is provided for hand washing after using the fixtures.

The second floor is devoted to lockers of steel, wash basins and shower baths, and the third or roof floor is as described above.

All the fittings throughout are the best that could be procured. Hot and cold water is supplied to basins and showers.

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A caretaker is on hand at all times and thorough cleanliness is insisted upon.

The accompanying photographs which are shown herewith speak for themselves. Can anyone imagine that employes will not enter into the spirit of Good Health, Safety, Efficiency and Contentment if conditions are maintained at all times in that factory as shown by these photographs.

THE BUREAU OF INSPECTION DURING APRIL, 1917, IN ADDITION TO MAKING INSPECTIONS FOR SAFEGUARDING OF MACHINERY, ENFORCING WOMEN'S AND CHILD LABOR LAWS, ADVANCED SAFETY IN BUILDING CONSTRUCTION, IN BOILER OPERATION AND BY INVESTIGATION OF ACCIDENTS.

The Divisions of Accident Investigation, Building Inspection and Boiler Inspection were especially active during the month of April, supplementing the general work of the field inspectors who made inspections for safeguards, investigated workmen's compensation cases, enforced women's and child labor laws and other legislation authority for the enforcement of which is vested in the Department.

In all sections of the State, field inspectors made rigid investigations of conditions surrounding fatal and serious accidents and formulated methods to prevent the recurrence of similar casualties.

In the Division of Building Inspection, 33 fire escapes were ordered during the month and 64 plans were approved for 36 fire escapes; 9 theatres; 18 buildings and one toilet and washroom. There were 71 new plans received at the Division during the month and 30 revised plans.

In the Division of Boiler Inspection reports were received of 3,012 inspections during the month. These inspection reports were carefully checked. The reports of some of the accidents investigated and the work of the Divisions of Building Inspection and Boiler Inspection are given in more detail in the following pages:

Division of Accident Investigation

Safety Belts Necessary in Accident Prevention.—Safety belts with life lines attached should be provided for window cleaners and for men working on smoke stacks, on electric transmission lines or en-

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gaged in other similar work at a considerable height from the ground.

The following is an account of an accident in which a life was lost because a belt had not been provided and used.

A man, with two other workers, was helping on the cleaning door platform around the top of an H. blast furnace stove about one hundred feet above the ground. The men had been ordered to remove a section of the platform in order to change the position of a boom, and when removing a floor beam, the unfortunate man fell to the ground, striking a steam pipe in his descent.

* * *

Removal of Guards.—Guards may be made removable in order to facilitate inspection, oiling or repairing of the various parts of a machine, but guards should never be taken off except for good and sufficient reasons, and then only by the foreman's special order, when the machinery is stopped. Machines from which the guards have for any reason been removed should not be operated until guards have been replaced.

Guards are often removed by employes, either because they think the work can be better done or more expeditiously done without them. This practice should be strictly prohibited; and those in charge should be on the alert at all times to detect such offences in order that accidents may be averted.

Recently a young woman, employed in a worsted mill was seriously injured when her arm was caught in the cogs of the machnie she was operating. The cogs had been provided with a guard, but it had been removed, and she continued to operate the machine for a period of at least four weeks without the guard. She attempted one day to operate the belt shifter with her hand from the inside of the machine rather than to move around the machine and use the handle of the shifter, and the result was that her sleeve caught in the cogs and before the machine could be stopped, her arm was drawn in between the teeth, and the flesh between the elbow and wrist was terribly cut and mangled.

* * *

Circus Stunt.—An electrician, employed by a steel company, was putting up telephone cable. He was to climb the poles and place the cable over the lower cross arm while other workmen handled the slack.

When work began the lineman told his fellow workmen that he was going to walk the messenger wire between the poles. This messenger wire is located about twenty feet above the ground. He was told to "play the game safe," and his attention was also called to the high tension wire above the messenger wire. He apparently agreed

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to "play safe" and started to climb the poles, putting up the cable, descending to the ground, and walking to the next pole. However, after getting over a hill, out of sight of the other workmen, instead of coming down each pole after placing the cable, he attempted to walk the messenger wire to the next pole, a distance of forty-five feet. Having advanced to about the middle of the span, he reached up to preserve his balance, and caught hold of the high tension wire and was electrocuted, falling on a car of bricks below.

Although the man was an experienced lineman, his act was one of sheer recklessness, for he not only exposed himself to the danger of death by falling, but also by electrocution.

Horse play or circus stunts should be eliminated, for invariably they result seriously, and frequently fatally, as in the above case. Play safe at all times and in all places.

* * *

Neglect of Wound.—While an employe was operating a lathe, in a car manufacturing plant, a steel shaving from a tool cut the second finger on his right hand. He failed to report the injury and continued to work for three days, when blood poisoning developed. When the attention of the safety engineer was called to the accident, the injured man refused to submit to treatment at the plant as he had been advised by his physician to do, but insisted upon going to his home several miles distant from the plant where he had neither the care of the physician or the oversight of his employer. He died of septic pneumonia one month from the date of the injury.

No injury however slight or seemingly trivial should be neglected, but on the contrary should be reported and treated immediately.

* * *

Boyish Pranks.—Recently in a manufacturing plant where ammunition was being made, the night watchman was overcome by smoke and gases, caused by a fire started through pranks of two of the young employes. The fire was caused by the upsetting of an open can of gasoline, which was used for cleansing a small tool that was dipped in resin each time a shell was completed. While the two boys were playing catch with a small wooden box, a bad throw caused the box to strike the can, upsetting it, and spilling the contents on a nearby burning gasoline torch. In an instant the building was aflame with the above stated results.

* * *

Failure to Display Danger Flags.—Many serious and fatal accidents are caused by engines or drafts of cars suddenly bumping into other cars under or around which men are working, and the following is an account of such an accident occurring recently in the yards of a bridge manufacturing company.

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A crane operator, engaged in unloading coal from a car, went under the car, to adjust the chain on the hopper doors, contrary to the company's orders; the company regulation being that no one should work under or about cars until a signal had been placed at each end of the car or draft. An engine coming down the track bumped the car, and moved it forward dragging the workman over the ties and injuring him so badly that death soon followed.

The rule of this company for its private railroad yard is as follows:—

"A blue flag by day and a blue light by night, displayed at one or both ends of an engine, car or train, indicates that workmen are under or about it. When thus protected, it must not be coupled to or moved. Car inspectors and other workmen must display the blue signals before going to work under or about any engine, car or train, and the same workmen only are authorized to remove them. Other engines or cars must not be placed on the same track so as to intercept the view of the blue signals." If this rule is adopted and rigidly enforced and obeyed, accidents from the above cause will be greatly reduced, if not wholly eliminated.

* * *

Gross Carelessness.—The disposition of employes to become careless and indifferent to danger is illustrated by the following report, and emphasizes the fact that we should always "practice what we preach," as the man involved in this particular accident was chairman of the safety committee and had without doubt preached carefulness to his men.

He had occasion to go upon a crane to examine the brake bands. He selected a one-inch board that was partly burned, and placed it across the bridge of the crane, then walked out on it. The board broke and he fell to the ground, fracturing both arms, injuring his right side and hip so severely that death resulted three weeks later. The board he used was not provided for this purpose, and instead of using care in getting a good substantial board, he took a board that was nearby, regardless of its condition, and he paid the penalty for his carelessness with his life.

* * *

Locomotive Crane.—The practice by workmen of riding on locomotive cranes, in places other than the cab, has resulted in several fatal accidents, and strict rules should be adopted and enforced prohibiting this practice.

The following are accounts of two fatal accidents of recent date due to this cause.

In the one case, a man, contrary to orders, was riding on the deck of a crane car. His duties required that he run with the crane

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to throw the switches. The cab and boom of the crane were swung at an angle to the track and the man was standing at the rear end of the cab. The engineer in the operations of the crane, swung it around parallel with the track, and by such a movement, the workman would have been knocked off the car by the cab as it came into position, parallel to the track. He attempted to climb up the ladder on the side of the cab, slipped and fell on the crane car and was caught in the circle between the bottom of the cab and the deck of the car, a space of about eight inches. The accident resulted in his death.

This fatality was due to disregard of orders, negligence and carelessness.

In the second case, the crane operator, who is officially in charge of the crane, had instructed the fireman to go ahead and throw the switch. Instead of walking to the switch, a distance of about one hundred and fifty yards, the fireman stepped on the stirrup at the corner of the crane, evidently intending to ride to a point near the switch. In this position the crane operator could not see him and was not aware that he was riding upon the truck. As the operator swung the boom around, the rear end of the crane proper struck the man from behind, crushing him against the truck of the crane.

* * *

Curiosity.—Unable to restrain his curiosity in a moment of danger, an employe of a tin plate company paid the ultimate cost. It appears that he was assisting to remove a length of shafting supported on bearings, which were resting on the bottom member of the roof truss, twenty-four feet from the ground. A block and tackle had been fastened near one end of the shaft preparatory to its lowering, and although the man had, by his foreman's orders, retired to a point of safety, he later returned to the vicinity of the operation. The shaft, after being pushed out of the bearing, swung around and hit the man with such force as to knock him off the platform and cause him to fall to the ground with the result that his skull was fractured.

* * *

Smoking.—An employe of a pipe and tubing company, after lighting his pipe, dropped the match on his apron which was saturated with oil, and it immediately burst into flames. Before any of his fellow workers could aid him, he ran through the mill, and when he was finally overtaken, and the flames smothered with blankets, he was burned so badly that he died two days later.

* * *

Neglect to Open Valves.—An employe of a gasoline company was engaged in starting a gas engine, which operates the machinery of the plant, and although he had had several years' experience in

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the operation of gas engines, he neglected to open the discharge valves. When he discovered the valves were not open, instead of stopping the machinery, he attempted to open the valve with his hand, but the pressure was too great. He sent a fellow employe for a wrench, but before the man returned, the cylinder exploded, tearing the engineer's right arm off at the elbow, causing his death nine hours lated.

* * *

Took a Chance.—An engineer employed by a wrought iron pipe manufacturing company was directed to make repairs to a conveyor drive.

Although there were no witnesses, a careful investigation of the circumstances indicated that the engineer entered the pit without being certain that the steam could not enter the cylinder of the engine, for after getting within the railing, he either stepped on the shaft or pulley, which threw him to the bottom of the pit, killing him instantly.

Although this company has strict rules prohibiting the oiling, adjusting or repairing of machinery in motion, this man "took a chance" and paid the penalty for his venture with his life.

As a warning to other employes against the violation of this rule, the company had the following cards printed and distributed to each of the men:

IT MAY BE YOU THE NEXT TIME!

*** * * * lost his life. The Coroner's Report and our investigation show that HE TOOK A CHANCE. He intended to oil or repair MACHINERY IN MOTION. We do not sanction the wiping, oiling or repairing of machinery while in motion. We prohibit it as far as lies in our power. Learn your lesson from the above.**

STOP THAT MACHINERY BEFORE OILING, CLEANING OR REPAIRING IT, and you will feel much better. Your family will appreciate it and so will we.

If you see someone taking a chance tell him and tell us. We will thank you if he doesn't. Take this card home and put it in a prominent place

IT MAY SAVE YOUR LIFE!

* * *

Rusty Nail.—While engaged in tearing down an old frame building, a laborer, who was employed to assist the janitor, steppped upon a rusty nail which was projecting from a board, and slightly punctured his foot. Although he was urged to go immediately to a physician and have the wound treated, he refused to go and continued to work.

The wound became infected, and ten days after the injury the man died from lockjaw.

* * *

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Slight Injury.—An employe of a lumber company was using a hand power spiral drill in drilling a nail hole in a piece of hard wood molding. He was holding the point of the drill with his left hand and evidently released the spring too rapidly, which caused the drill to slip and pierce the third finger of his hand.

The injury was apparently very slight and very little or no attention was paid to it until three days later whn it bcame swollen and inflamed, resulting in death thirteen days after the injury was received.

* * *

Failure to Heed Sign.—Although the sign "keep off" had been placed upon the freight elevator, and in addition, the plant rules prohibited any employe from riding on this elevator, a young man disregarded both the sign and the order, and started to go up on the elevator. Apparently, he became excited when the elevator had reached a point about ten feet above the floor, and in some manner fell off the car. His skull was fractured and he died instantly.

* * *

Failure to Replace Guard.—A few days prior to the accident here recorded, an employe of a training school for boys, who was designated as general utility man on the pay roll, and held the position of general foreman in charge of oil wells, gas wells, water wells, cold storage plant, electricity and plumbing, removed a direct connected water pump from one pump house and installed it in another. When he installed the machine in its new location, he neglected to replace the guard over the gears on the pump. On the morning of the accident, he went to the pump house, as was his custom, when coming on duty, to see that the pump was working properly. Although he was in the building alone, it is evident that he went to the rear of the pump to make some adjustment. In some manner, his overalls must have caught in the gears, which drew him down and crushed his side. He was dead when found about a half hour from the time he was supposed to have entered the pump house.

* * *

Injury.—An employe of the motive power department of a railroad company was assisting the hostler in removing a car that was on the turn table, and when this work was done, he stepped on the turn table to ride around to the stall to look at the water gauge on some locomotives, as this was his regular employment. Before the turn table came to a stop, he attempted to step off, but he fell and his left leg was caught between the edge of the table and the frog on the track leading to one of the stalls in the round house. His leg was lacerated so severely that death followed the next day.

* * *

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Projecting Set Screw.—A foreman of a gang of men, who was engaged in removing a gallery or platform preparatory to making repairs to a building, was removing a panel of a belt guard, and while endeavoring to wrench a nail loose, his coat caught on the set screw of the pulley, and he was whirled around the shaft with such force that both legs were torn off below the knee and almost every bone in his body was broken.

* * *

Neglect of Wounds.—An employe of the Board of Public Education of one of the cities of this State was engaged in installing a rain conductor with the use of a hoisting pulley to raise the conductor. The rope broke and threw the man off his balance, and in order to save himself from falling, he stepped backward upon a projecting nail which penetrated the little toe. The injured man did not report for treatment until the wound had become infected, and after he was admitted to the hospital, tetanus developed, and he died the next day.

* * *

Carelessness.—A fireman of a traction engine had been in the habit of placing a board over the smoke stack in order to keep up the fire during the night. On this particular morning, he climbed up on the fly wheel and endeavored to remove the board. A sudden movement of the wheel threw him off, and in his descent, the back of his head struck on the edge of the water tank, crushing his skull and causing instant death.

* * *

Carelessness.—While a motor inspector, who was employed by a steel company, was searching for a pair of pliers, he went beneath the rolls of the transfer table and carelessly raised his head up between two rolls just as an ingot came down the table. The ingot struck him on the left side of the head, killing him instantly.

* * *

Carelessness.—While working in an ash pit "breaking up the fire," an employe of an iron company was struck on the head by a piece of slate.

This ash pit is about two feet below the level of the furnace and is separated from the furnace and coal bin by a sheet iron partition which is about four feet high.

At the time the man was "breaking up fire," coal was being unloaded into the bin. There was a small piece of slate in the coal, which the puddler picked up and threw over the sheet iron partition, into the ash pit, striking the workman on the temple. The injury was not considered serious, and the man continued to work for some time when suddenly he became ill, and he died about four hours

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after the accident happened. It was then discovered that his skull had been fractured.

Division of Building Inspection, April, 1917.

In summing up the work of the Division of Building Inspection during the month of April, it is evidenced that the submission of plans to the Department continues with unabated regularity and a percentage of the plans, upon first presentation, have been rejected; first, on account of lack of details; and second, in a great many cases, either for the reason that unobstructed passageways to fire escapes were not shown or that exits and stairways from buildings were insufficient.

Many buildings present a condition where the terminal of a fire escape is in a court which has no outlet to the streets. The inspectors always endeavor to relocate such a fire escape placing it on the street, alley or yard side of the building. This, in a great many cases cannot be accomplished, and it has at times been necessary to arrange for a fire proof passageway through the ground floor of the building to the street. It is advisable to partition this passageway off from ground floor rooms with brick, tile, concrete or metal lath and cement plaster.

A rather interesting proposition for a moving picture theatre building presents itself in cities and towns where the grade is exceedingly steep. The first floor at the front of the building is the basement floor at the rear of the building. The solution of installing a theatre in such a building is, if at all feasible, to take advantage of the grade with the entrance at the high point and the screen end of the building at the low point. In this manner, it is possible to secure side exits at the ground level; otherwise, it would be impossible to secure side exits or exits at the high point of the building without the use of steps.

According to the present requirements of the Industrial Board of Pennsylvania, no steps are allowed at the exits or entrances of any theatres other than a step of eight-inch rise to keep out weather conditions.

The following tabulation shows buildings which have been afforded protection in the several sections of the State during the past month through the efforts of this division.

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Plans Approved During Month of April, 1917.

FIRE ESCAPES.

Town.	Building.	Contractor or Architect.	Owner.
Apollo,	Hall,	Gary-Kissane Company,	I. O. O. F.
Cresco,	Hotel,	Scranton Iron & Steel Co...	Chas. Langfeld.
Ardmore,	Y. M. C. A.,	H. L. Reinhold,	W. P. Abie, Pres.
Reading,	Apartments,	W. F. Remppis Co.,	C. W. Kissinger.
East Stroudsburg,	Hotel,	Scranton Iron & Steel Co...	M. L. Bach.
Easton,	Apartments,	Ed. Paul Richter,	I. B. Hochman.
Spring Mills,	Lodge Hall,	Geo. W. Anne & Son,	John Smith & Bro.
Delaware W. Gap,	Hotel,	Cameron Engineering Co....	J. H. Graves.
South Bethlehem,	Apartments,	W. F. Remppis Co.,	C. Weirbach.
South Bethlehem,	Apartments,	W. F. Remppis Co.,	Alex. Graham.
Nanticoke,	Office Building,	Mechanical Department, S. C. Co.	Susquehanna Coal Co.
Allentown,	Store and Apartments	Ruhe and Lange,	G. C. Aschbach.
Kingston,	Seminary,	Scranton Iron & Steel Co...	Wyoming Seminary.
Mahanoy City,	School,	Kemper Construction Co....	Mahanoy School Board.
Pottsville,	Apartments,	W. F. Remppis Co.,	M. Duna.
Palmyra,	Factory,	Geo. W. Anne & Son,	Landis Shoe Co.
Easton,	Store and Apartments	E. H. Wenzelberger,	Mr. Rosenbaum.
York,	Lodge Hall,	Geo. W. Anne & Son,	L. O. O. M.
Reading,	Apartments,	Roeper Hoist Co.,	H. P. Roeper.
Pottsville,	Barracks,	W. F. Remppis Co.,	State Constabulary.
Sayre,	Apartments,	Letts & Austin,	Mr. Burgett.
Wilmerding,	Store and Apartments	Keystone Ornamental Iron Works.	F. A. Faller.
Meadville,	Lodge Hall,	Hartman & Judd,	N. W. Securities Co.
Carrick,	School,	E. L. Rieseck,	Carrick School Board.
Dickson City,	Apartments and hall,	Scranton Iron & Steel Co...	I. O. O. F. Assn.
Stroudsburg,	Hotel,	Scranton Iron & Steel Co...	M. L. Merwin.
Tobyhanna,	Hotel,	Scranton Iron & Steel Co...	Tobyhanna House.
Lewistown,	Apartments,	Potts Manufacturing Co....	Joseph Dreese.
Harrisburg,	Department Store,	Potts Manufacturing Co....	Souters' Department Store.
Lebanon,	Office Building,	Geo. W. Anne & Son,	American Iron & Steel.
Eagles Mere,	Hotel,	Harris and Richards,	William Woods, Mgr.
Point Marion,	Hall and apartment,	Taylor & Dean,	Mrs. Francis Conn.
Johnstown,	Factory,	Geo. J. Griffith,	Geo. W. Swank.
Johnstown,	Apartments,	Geo. J. Griffith,	Henry Saly.
Sayre,	Bank and Lodge Hall,	Letts & Austin,	National Bank of Sayre.
Sayre,	Apartments,	Letts & Austin,	Sayre Land Co.

THEATRES.

Belle Vernon,	M. P. T.,	J. C. Brenton,	Jeffire Marina.
Blairsville,	M. P. T.,	H. C. Lehman,	United Business Men's Association.
Connellsville,	Theatre,	Henderson, J. H.,	Trimble and Twerffs.
New Bethlehem,	M. P. T.,	Thomas F. Williams,	A. A. Stewart.
Hyndman,	M. P. T.,	W. A. Soloman,	B. H. Sheirer.
Shamokin,	M. P. T.,	W. H. Lee,	Geo. J. Higgins & Son.
Mansfield,	M. P. T.,		W. A. McCausland.
Mt. Oliver,	M. P. T.,	August F. Klein,	James Wilkinson.
Butler,	Theatre,	J. W. Ketterer,	Geo. Gepeddis.

BUILDINGS.

Shippensburg,	Factory,	C. A. Heller,	Thrush and Stough.
Wilkes-Barre,	Temple,	Richmond and Kemp,	Masonic Temple.
Reading,	Apartments,	H. G. Mohn,	Walter Mast.
Red Lion,	Factory,	Trust Concrete Steel Co....	Red Lion Cabinet Co.
Johnstown,	Apartments,		Geo. Wild.
South Bethlehem,	Tenement,	R. H. C.,	Samuel Repsher.
Bristol,	Factory and Office,	Wager-Fisher,	Rohm and Haas.
Bristol,	Mfg. Building,	Wager-Fisher,	Rohm and Haas.
Wilkes-Barre,	Store and Apartments	Geo. F. Schroeder,	Catherine W. Mayock.
Reading,	Apartments,	H. G. Mohn,	Fred Hodges.
Reading,	Apartments,	Calvin J. Young,	Dr. Geo. K. Levan.
Newmanstown,	School,	Calvin J. Young,	Mill Creek Twp. School Board.
Clearfield,	Court House,	W. H. Overdorf,	County Commissioners.
Reading,	Factory,	B. F. Groff,	F. S. Werts & Son.
Reading,	Wholesale Building,	Daniel H. Hunter,	Swift & Co.
Allentown,	Hospital,	Lewis H. Gile,	Sacred Heart Hospital.
Mahanoy City,	Factory,	Shamokin Lumber and Manufacturing Co.	Maurice Janowits.
Reading,	Apartment,	A. A. Heilman,	Becker & Redding.

TOILETS AND WASH ROOMS.

Dunmore,	Locker-Room,	Eng. of B. and B.,	Erie R. R. Co.

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SUMMARY.

Fire Escapes,	36
Theatres,	9
Buildings,	18
Toilets and wash rooms,	1
Total,	64
New Plans Received During Month of April,	71
Revised Plans Received During Month of April,	30
Total,	101

FIRE ESCAPES ORDERED DURING APRIL, 1917.

Inspector.	*Town.*	*Owner.*
G. W. Meyers,	Lock Haven,	Lock Haven Express Publishing Co.
James Barry,	Springdale,	American Glue Co., John A. Stevenson.
W. T. Simpson,	Carbondale,	Carbondale Bottling Co., David Davis.
W. P. Shoemaker,	Waverly, N. Y.,	So. Waverly School Board, E. C. Ropp.
W. P. Shoemaker,	Towanda,	W. E. Lane.
W. P. Shoemaker,	Towanda,	P. S. Sickler.
W. P. Shoemaker,	Towanda,	John S. Mingos.
W. P. Shoemaker,	Towanda,	Bailey Block, William Little, Agt.
W. P. Shoemaker,	Towanda,	Kaufman Building, M. Kaufman.
W. P. Shoemaker,	Towanda,	Thomas Walsh.
W. P. Shoemaker,	Towanda,	424 Main Street, B. Loewus.
J. G. Boyce,	Punxsutawney,	Hotel, Messrs. Clover & Edelblute.
James McCann,	Altoona,	Elias G. Burket.
M. J. Gibney,	Wernersville,	Grand View Sanatorium.
Frank L. Diehm,	Denver,	Halpern & Walter.
W. P. Shoemaker,	Towanda,	L. J. Sheehan, Bridge Street.
W. P. Shoemaker,	Towanda,	Morgan L. Kaufman, Mears Building, Scranton.
M. J. Gibney,	Walters Park,	Walters Park Sanatorium Co.
M. J. Gibney,	Reading,	Cohen Brothers, J. L. Cohen.
James S. Darr,	Connellsville,	J. O. of Odd Fellows Temple, John Wilder.
James McCann,	Johnstown,	George B. Glenn.
J. G. Boyce,	Philipsburg,	Mrs. Sadie Davis.
James McCann,	Tyrone,	Wilson Chemical Co.
W. G. Fisher,	Mt. Carmel,	H. A. Bird.
J. G. Boyce,	Punxsutawney,	Peerless Shoe Co., W. A. Dick, Agt.
W. T. Simpson,	Jessup,	School Board, Winton Borough.
W. T. Simpson,	Jessup,	School Board, Annex to Franklin School Bldg.
W. T. Simpson,	Throop,	Throop Silk Co.
W. P. Shoemaker,	Towanda,	John W. Codding, Agt.
W. P. Shoemaker,	Towanda,	Mantua Hook and Ladder Co.
W. P. Shoemaker,	Towanda,	St. Agnes Convent.
W. P. Shoemaker,	Towanda,	M. L. McMahon.
Frank L. Diehm,	Lancaster,	Slaymaker Building.

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Division of Boiler Inspection

The total number of boiler inspections, coming under the jurisdiction of the Department of Labor and Industry, during April, was 3012. The number of condemned boilers was twelve, although a number of serious defects in other boilers were discovered, and immediate steps were taken for elimination of these faults. Minor defects were numerous, and the Department Inspectors were active in advising operators in the safe and proper care and management of boiler plants.

The following is the summary of the work of the boiler division during April.

Total inspections reported to Division,	3012
Internal,	1563
External,	1426
Internal corrosions, serious,	29
Internal corrosions, minor,	204
External corrosions, serious,	38
External corrosions, minor,	87
Pitting, serious,	31
Pitting, minor,	263
Grooving, serious,	16
Grooving, minor,	35
Defective tube ends, minor,	228
Defective tube ends, dangerous,	16
Defective furnaces, minor,	137
Defective furnaces, dangerous,	15
Fractures, minor,	3
Defective water gauges, serious,	24
Defective water gauges, minor,	105
Defective safety valves, serious,	12
Defective safety valves, minor,	66
Defective pressure gauges, minor,	55
Defective pressure gauges, serious,	10
Broken stays,	172
Bulges,	151
Unclassified defects,	1186
Condemned boilers,	12
State inspections,	333
Manufacturers' data reports,	130
Casualty companies' reports,	2269
Serious defects reported eliminated,	116

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BUREAUS OF STATISTICS AND INFORMATION AND WORKMEN'S COMPENSATION SHOW THAT 1,032 WORKERS WERE KILLED DURING THE FIRST FOUR MONTHS OF 1917 AND 82,044 OTHER WORKERS WERE INJURED. DURING THE SAME PERIOD COMPENSATION AMOUNTING TO $1,529,932.55 HAS BEEN AWARDED TO DEPENDENTS OF WORKERS KILLED AND $816,159.01 HAS BEEN PAID TO WORKERS DISABLED.

During the first four months of 1917 workmen's compensation amounting to $1,529,932.55 was awarded to dependents of workers killed while $816,159.01 was paid to workers injured in industry and disabled for more than fourteen days. Of the total amount of fatality compensation, to be paid over periods of time up to sixteen years, there has been $163,593.21 paid during the first four months of this year. In other words from January 1, 1917 to May 1, 1917 workmen's compensation payments and awards amount to $2,346,091.56.

The record of the Compensation Bureau for the month of April is indicated in the following table:

REPORT OF WORKMEN'S COMPENSATION BUREAU FOR APRIL, 1917.

Accident reports received:	Fatal.	Total.
January,	232	21,839
February,	227	19,395
March,	291	23,328
April,	282	18,514
Totals,	1,032	83,076

Agreements approved:	Fatal.	Total.
January,	136	6,890
February,	142	5,683
March,	154	7,509
April,	332	6,950
Totals,	764	27,032

Compensation Awarded and Paid:	Fatality Awarded.	Fatality Paid.	Disability Paid.
January,	$342,750 56	$41,867 89	$217,511 60
February,	387,795 46	25,338 34	174,132 22
March,	410,168 48	29,215 85	209,213 80
April,	389,218 05	67,171 13	215,301 39
Totals, 1917,	$1,529,932 55	$163,593 21	$816,159 01
Totals, 1916,	2,965,255 72	147,281 54	1,259,619 71
Grand totals,	$4,495,188 27	$310,874 75	$2,075,778 72

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BUREAU OF STATISTICS AND INFORMATION COMPILES RECORD OF INDUSTRIAL ACCIDENTS IN PENNSYLVANIA FOR THE YEAR 1916 SHOWING 255,616 ACCIDENTS REPORTED, OF WHICH 2,670 WERE FATALTIES.

Accident reports received at the Bureau of Statistics and Information during the year 1916 indicate 2,670 fatalities from a total of 255,616 accidents reported. Of the total number of workers killed, 2,656 were men and 14 were women. Of the total number of workers receiving injuries and including fatal cases, 250,167 were men and 5,449 were women.

There were 59,714 accident reports indicating that the workers were disabled for periods exceeding fourteen days, classed as serious accidents, and there were 193,232 reports indicating that the workers sustained minor injuries causing disability for periods less than fourteen days.

Industrial accidents in Pennsylvania during 1916 caused injured workers to lose time equivalent to 3,025,371 working days. The total amount of wages lost by injured workers amounted to $7,535,059.

Classification of the accident reports, received during 1916, has been made in the Bureau of Statistics to show the various kind of injuries received, the parts of the body injured and the parts of the body lost through amputation as a result of accident. These figures are subject to slight variations in the final analyses to be made by the Statistics Bureau.

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PENNSYLVANIA DEPARTMENT OF LABOR AND INDUSTRY ACCIDENTS REPORTED IN 1916.

	Total.	Males.	Females.
Total number of accidents,.....	255,616	250,167	5,449
DEGREE.			
Fatal, ...	2,670	2,656	14
Serious disability exceeding 14 days,.....	59,714	58,670	1,044
Minor disability less than 14 days,.....	193,232	188,841	4,391

Number of dependents of workers killed and injured,.....	211,327
Number of days lost by workers injured,.....	3,025,371
Total amount of wages lost by workers injured,.....	$7,535,059

NATURE OF INJURY.

Burns and scalds, ...	17,282
Crushes and bruises, ...	87,071
Cuts and lacerations, ...	71,868
Fractures, sprains, and dislocations,.....	37,400
Hernia, ...	1,254
Blood poisoning, ...	3,755
Punctures, ...	8,387
Unclassified, ...	28,599

PART OF BODY INJURED.

Trunk, ...	33,440
Head and face, ...	21,631
Eyes, ...	20,665
Arms, ...	15,129
Hands, ...	30,513
Fingers, ...	62,656
Legs, ...	22,954
Feet, ...	34,334
Toes, ...	14,294

LOSS OF MEMBERS.

Eyes, ...	366
Arms, ...	59
Hands, ...	105
Fingers, ...	1,111
Legs, ...	111
Feet, ...	48
Toes, ...	87

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BUREAU OF MEDIATION AND ARBITRATION SETTLED NINE STRIKES INVOLVING 1,481 EMPLOYES DURING THE MONTH OF APRIL, 1917.

The Bureau of Mediation and Arbitration responded to fourteen appeals for mediators during the month of April, 1917, and through their efforts nine of the strikes, involving 1,481 employes were settled. Five of the strikes in which mediators attempted to effect settlement were still pending May 1.

These five strikes involved 447 employes. During the entire month of April thirty-seven strikes were reported to the Bureau. These thirty-seven strikes involved 5,311 employes and during the continuance, estimates at the Bureau, indicated a loss in wages amounting to $106,673. A complete record of the strikes reported during the month and the strikes in which Department mediators acted, classified by industries and counties are given in the following table:

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Industry.	Strikes Reported During Month.						Strikes in Which Department Mediators Acted.						
	Total number.	Employes involved.	Settled.	Employes involved.	Pending.	Employes involved.	Total number.	Employes involved.	Settled.	Employes involved.	Pending.	Employes involved.	Total estimated loss in wages.
Miscellaneous,	2	259	.....	.....	2	259	.....	.....	.....	.....	.....	.....	.....
Building trades,	7	979	6	949	1	30	2	650	2	650	.....	.....	$42,100 00
Garments,	2	100	1	50	1	50	2	100	1	50	1	50	631 00
Textile,	2	32	.....	.....	2	32	1	17	.....	.....	1	17	.....
Metal,	10	1,967	6	1,245	4	722	3	350	2	262	1	88	6,490 00
Mining,	7	1,512	4	720	3	792	3	492	1	200	2	292	25,000 00
Public Service,	6	447	5	372	1	75	3	319	3	319	.....	.....	32,452 00
Ship building,	1	15	.....	.....	1	15	.....	.....	.....	.....	.....	.....	.....
Total,	37	5,311	22	3,336	15	1,975	14	1,928	9	1,481	5	447	$106,673 00
County.													
Allegheny,	2	305	.....	.....	2	305	.....	.....	.....	.....	.....	.....	.....
Bedford,	1	200	1	200	.....	.....	1	200	1	200	.....	.....	$11,000 00
Cambria,	2	500	2	500	.....	.....	.....	.....	.....	.....	.....	.....	13,800 00
Chester,	1	17	1	17	.....	.....	1	17	1	17	.....	.....	900 00
Clearfield,	2	292	.....	.....	2	292	2	292	.....	.....	2	292	.....
Erie,	3	428	2	398	1	30	1	250	1	250	.....	.....	32,200 00
Fayette,	1	12	1	12	.....	.....	1	12	1	12	.....	.....	.....
Lackawanna,	3	404	1	250	2	154	1	250	1	250	.....	.....	1,250 00
Lawrence,	1	500	.....	.....	1	500	.....	.....	.....	.....	.....	.....	.....
Lehigh,	1	22	1	22	.....	.....	.....	.....	.....	.....	.....	.....	100 00
Luzerne,	3	535	2	35	1	500	.....	.....	.....	.....	.....	.....	400 00
Mercer,	1	250	1	250	.....	.....	1	250	1	250	.....	.....	21,600 00
Montgomery,	1	26	1	26	.....	.....	.....	.....	.....	.....	.....	.....	1,040 00
Montour,	2	138	1	50	1	88	2	138	1	50	1	88	631 00
Northampton,	3	119	3	119	.....	.....	1	52	1	52	.....	.....	1,402 00
Northumberland,	1	200	1	200	.....	.....	.....	.....	.....	.....	.....	.....	18,000 00
Philadelphia,	6	545	2	448	4	97	3	467	1	400	2	67	850 00
Westmoreland,	1	800	1	800	.....	.....	.....	.....	.....	.....	.....	.....	4,000 00
York,	2	18	1	9	1	9	.....	.....	.....	.....	.....	.....	.....
Total,	37	5,311	22	3,336	15	1,975	14	1,928	9	1,481	5	447	$106,673 00

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WORK OF THE BUREAU OF EMPLOYMENT DURING APRIL, 1917.

The activities of the Bureau of Employment during the month of April were largely the securing of orders and applications for farm work. An effort was made to induce many of the students in colleges and other institutions of learning to engage in some sort of agricultural work during the vacation period. The presidents and deans of colleges urged the young men under their care to serve their country during the summer by increasing the output of food stuffs. For this reason the Bureau found little difficulty in securing applications from students. But, as many of these students are not available for work before June and even as late as July, the records of placements of this nature was only begun during April. Many of the colleges, however, were willing to grant the students academic credit for the remainder of the term if they would engage immediately in agricultural work. Many students took advantage of the offer and were willing to go to work at once. In high schools, the boys also offered their services to their country by applying for farm work of some nature.

In addition to the applications for farm work from students in schools and colleges, hundreds of applications were received from persons with experience as farmers, and also from many volunteers not experienced, but who wishes to serve their country in this special manner.

The newspapers of the State published daily articles on the value of farm work this year. Many special committees and organizations set to work and with all these committees the State Bureau of Employment co-operated in every way possible.

The State Bureau of Employment sent out about 16,000 letters and questionnaires to farmers in Philadelphia county and the surrounding counties, Delaware, Chester, Montgomery and Bucks on the subject of farm help. The questionnaires filled out by the farmers were returned to the Farm Bureaus in their respective districts and with further information were later received at the Philadelphia office of the Employment Bureau.

In the Pittsburgh, Johnstown and Altoona offices of the Bureau, the plan was about the same as in Philadelphia. Various committees worked in co-operation. In Altoona, the bankers of Blair County also met with the committees to discuss methods of making loans to farmers in order to aid them in their work.

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The form of letter and questionnaires sent out by various offices is practically the same. The following form is the one prepared by the Safety Council in Altoona in co-operation with the Altoona Chamber of Commerce, the Blair Country Farm Bureau and the State Bureau of Employment.

Each farmer within certain assigned districts received the following form letter:

Altoona, Pa.

Dear Sir:—

The sub-committee of the Public Safety Council of the State of Pennsylvania appointed by Governor Brumbaugh, representatives of the Altoona Chamber of Commerce, the Blair County Farm Bureau, and the Pennsylvania State Employment Bureau at this place, met to formulate plans to meet the emergency of our country in the matter of food production and marketing.

The task of helping the farmers of Blair County to obtain labor on the farm, has been turned over to the local office of the Bureau of Employment.

Kindly fill out the enclosed questionnaire. If the questions asked do not touch all your needs, use the reverse side of this sheet for any additional requests.

This move is being taken to meet the needs for farm labor in this emergency of our country and the best service cannot be rendered without your hearty co-operation.

Yours very truly,
PENNSYLVANIA STATE EMPLOYMENT BUREAU,
ELVIN E. MYERS,
Secretary.

PUBLIC SAFETY COUNCIL OF THE STATE OF PENNSYLVANIA IN COOPERATION WITH THE ALTOONA CHAMBER OF COMMERCE, THE BLAIR COUNTY FARM BUREAU AND THE STATE BUREAU OF EMPLOYMENT.

Township.....

Name .....Address .....

Are you in need of farm help?.....

How many? ..... Males, ... Females, ...

When (.....) (.....) (.....)
State date. Season. Harvest only.

Will young men just from High School and College be satisfactory?.....

.....

What fertilizers will you need for the remainder of the season?.....

(.....) (.....)
Crop. Amount.

NOTE.—Replies are supposed to indicate only the needs not available in your community. This will be considered strictly confidential.

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What seeds will you need? (.....)
Crop.

.....(.....)
Amount.

May we assist you to procure short term loans on approved security?.....

If so, to what amount? $.....

It is too early to show the results of the work. Money orders were received from the farmers, and hundreds of applications from persons willing to do farm work. One college which received ten application blanks for students to fill out, wrote back: "We have used the blanks you sent and should like to have seventy-five more." A small industrial school sent ten applications from their students, all for farm work.

The farmers' orders are usually much like the following specimen in regard to wages and general conditions:

Yours of April 2d received and we thank you for the names of the two young men.

We pay anywhere from $20 to $35 per month and board, depending on the age and experience of the man.

We are now looking for a steady married man with one or two grown children or no children at all to move into our tenant house. For this we would pay $40 per month, free rent and wood. If you know of a good man who would care to move on our fruit farm, we would appreciate it if you would put us in touch with him.

Another farm order is about the same in its offers:

On my farm six miles from....., Pa., a man and his wife can earn $45 per month and have a house, fuel, and the necessary potatoes, apples and milk for their own consumption supplied.

The man will be expected to do general farm work and if possible I should like one who has had some experience. His wife would be asked to help with the house-work half the time in a family of two adults.

I am also in need of an energetic boy about fifteen to help with chores and milking for $10 per month and board.

Can you put me in touch with anyone who might undertake such work?

I shall be grateful for any assistance or information you may be able to supply.

RECORD OF WORK OF THE STATE EMPLOYMENT BUREAU DURING APRIL, 1917.

Harrisburg.

Number of persons asked for by employers,	366
Number of applications for positions,	387
Number of persons referred to positions,	299
Number of positions filled,	269

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Philadelphia.

Number of persons asked for by employers,	1,009
Number of applications for positions,	1,119
Number of persons referred to positions,	767
Number of positions filled,	655

Pittsburgh.

Number of persons asked for by employers,	1,436
Number of applications for positions,	745
Number of persons referred to positions,	636
Number of positions filled,	553

Johnstown.

Number of persons asked for by employers,	145
Number of applications for positions,	84
Number of persons referred to positions,	70
Number of positions filled,	58

Altoona.

Number of persons asked for by employers,	164
Number of applications for positions,	56
Number of persons referred to positions,	29
Number of positions filled,	24

Grand Totals for all Offices.

Number of persons asked for by employers,	3,120
Number of applications for positions,	2,391
Number of persons referred to positions,	1,801
Number of positions filled,	1,559

PLACEMENT WORK OF THE HARRISBURG OFFICE FOR THE MONTH OF APRIL, 1917, ACCORDING TO CLASSES OF OCCUPATIONS.

MEN'S DEPARTMENT.

Class. Per cent. of total.

	Openings.	Applications for Positions.	Placements.
Labor,,	32.0	33.7	34.5
Clerical and commercial,	5.0	8.8	7.7
Semi-skilled,	5.6	5.3	5.3
Skilled,	57.0	47.9	51.1
Technical and professional,	.3	4.1	1.1

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WOMEN'S AND GIRLS' DEPARTMENT.

Class.	Per cent. of total.		
	Openings.	Applications for Positions.	Placements.
Domestic and personal, ...	93.6	74.2	92.8
Professional, ...	1.0	2.2	.9
Commercial and clerical, ...	3.9	21.5	5.0
Factory work, ...	1.3	1.9	1.0

PLACEMENT WORK OF THE PHILADELPHIA OFFICE FOR THE MONTH OF APRIL, 1917, ACCORDING TO CLASSES OF OCCUPATIONS.

MEN'S DEPARTMENT.

Class.	Per cent. of total.		
	Openings.	Applications for Positions.	Placements.
Labor, ...	9.4	10.0	11.9
Clerical and commercial, ...	16.3	16.3	18.2
Semi-skilled, ...	26.9	21.3	22.5
Skilled, ...	45.5	50.8	46.2
Technical and professional, ...	1.9	1.6	1.2

WOMEN'S AND GIRLS' DEPARTMENT.

Class.	Per cent. of total.		
	Openings.	Applications for Positions.	Placements.
Domestic and personal, ...	72.1	61.6	58.3
Professional, ...	.4	3.8	2.5
Commercial and clerical, ...	15.4	15.1	18.9
Factory work, ...	12.1	19.5	20.3

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PLACEMENT WORK OF THE PITTSBURGH OFFICE FOR THE MONTH OF APRIL, 1917, ACCORDING TO CLASSES OF OCCUPATIONS.

MEN'S DEPARTMENT.

Class.	Per cent. of total.		
	Openings.	Applications for Positions.	Placements.
Labor,	55	20	19
Clerical and commercial,	02	14	07
Semi-skilled,	19	24	42
Skilled,	23	41	31
Technical and professional,	less than 1	less than 1	less than 1

THE LOCATION OF EVERY EMPLOYMENT AGENCY MUST BE APPROVED ACCORDING TO LAW.

An act approved the seventh day of June, 1915, Section 1, states:—

> "That no employment agent shall herafter conduct business for profit unless licensed to do so in accordance with the provisions of this act."

It is necessary for all persons carrying on the business of an employment agency for profit to take out a State license with the State Department of Labor and Industry through its Bureau of Employment. The license fee is fifty dollars and is good from the day of issue until the last day of September following. This license must be accompanied by a bond in the sum of one thousand dollars. The street address of the place of business must be given.

Before a license is issued, the character of the person making application is investigated; as is also the place where he wishes to carry on the business. The Department may refuse to issue a license if upon investigation it finds that the applicant is unfit to engage in the business, or has had a license or permit previously revoked; or that the business is to be conducted on, or immediately adjoining, unsuitable premises; or for any other good reason within the meaning of the law.

Many of the agents have changed their location and then notified the bureau of the change. This made it necessary for the following letter to be sent to all employment agents holding licenses, for they are bonded for one location and their bond is not valid for a different

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location unless the change of address is noted on the license. Moreover, the new location may not meet the requirements of the law.

The letter reads as follows:

Commonwealth of Pennsylvania
Department of Labor and Industry
Bureau of Employment
Harrisburg.

To all Employment Agents:

A number of agents have recently notified this office that they have moved from their old location to a new one and requested that we change their license to the new address. This letter is being sent out to all agents holding licenses to inform them that before they move, they must first notify this office of the address, so that an investigation can be made of the location by this Department.

After the Department has investigated the new place and agrees to change the license, then the agent must forward to this office, the old license which we shall change to conform with the new address. This license will not be forwarded, however, until the bond, which we shall return, is changed by the bonding company to the new location.

This rule must be lived up to. Failure to comply with it, may cause the refusal of a license for the new quarters. Kindly be governed accordingly, and oblige

Yours faithfully,

JACOB LIGHTNER,
Director.

THE ELECTRIC CODE OF THE INDUSTRIAL BOARD.

On July first, this year, Industrial Board Safety Standard No. 21, otherwise known as the Electric Code, becomes operative. This code, consisting of 183 pages, was prepared in co-operation with the National Bureau of Standards and has received the attention of many prominent engineers in the course of its preparation.

Pennsylvania is the first state in this country to adopt such an extensive code dealing with electrical safety and it is quite natural that its operation may from time to time suggest alterations that should be made and which could not have been anticipated in the process of preparation. Those to whom its provisions apply are, therefore, requested to report to the Industrial Boord such changes that their experience would show advisable. This will enable the Board to make such alterations intelligently where desirable, and thus remove any imperfections that may at present exist.

The introductory part of the code is quite comprehensive and includes, besides the regular introduction, a section on definitions of special terms and rules covering methods of protective grounding of circuits, equipment and lightning arresters. The nature of the

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ground connection, its location, size and resistance are described with much detail.

Part one gives rules for the installation and maintenance of electrical supply stations and equipment. Various sections treat on rotating equipment, storage batteries, transformers, switchboards, lightning arresters, etc. Methods are given for reducing danger of contact with live parts by either insulation, isolation or guarding. Adequate illumination and ventilation are specified when required. It has been the endeavor to anticipate all possible hazards and prescribe methods for their elimination.

Fifty pages are required to give rules for the installation and maintenance of electrical utilization equipment such as motors, lighting fixtures, electric furnaces and welders, portable devices, etc. The same method as followed in the first part is here also used in describing adequate safeguards. Persons operating utilization apparatus are usually less expert, electrically, than those operating supply equipment; hence, the rules in this part are somewhat more rigid and less dependence is placed on the electrical knowledge of the operator to prevent electrical accidents.

The last part covers operation of electrical equipment and lines. Many companies, operating high voltage transmission lines, do not have sufficient rules governing the switching and repairing of such equipment. On account of the nature of the work, the safety of the lineman depends largely on the switching operations of the man in the supply station or sub-station. In order to avoid accidents a clear understanding must always exist among the men involved in the operation. This can be accomplished best by having a rigid set of rules and procedures which must be adhered to. The experience of many large operating companies and engineers was available in the formation of the rules presented and practically no alterations will be necessary to apply them to any local condition.

Comprehensive discussions follow each part explaining the reasons for the various rules where they may not be apparent. In fact these portions of the code are extremely valuable to those practical men who know what to do but who may not have had sufficient training to know why certain things are done.

Copies of the code may be obtained from the Secretary of the Industrial Board, Harrisburg, Pa.

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INDUSTRIAL BOARD DISTRIBUTES WARNING SIGNS FOR CHEMICAL PLANTS MAKES ADDITIONAL RULINGS AND APPROVES SAFETY DEVICES.

Warning signs, to be posted in chemical plants throughout Pennsylvania, cautioning employes against dangers of dense acid fumes, have been prepared by the Industrial Board and are being distributed.

The poster sets forth that employes are prohibited from entering buildings or tanks where dense acid fumes exist unless a helmet is worn and in tank work a life line must be used.

Employes who have been exposed to acid fumes and who feel weak, sick and short of breath or who are attacked with cramps or coughing are ordered to report their condition at once to the foreman or go to the hospital immediately for proper treatment.

The Industrial Board fixes the responsibility for complying with the regulations, to safeguard workers in chemical plants, with the foreman or other person designated for that purpose by the management of the plant. A failure to comply with the regulations subject the offender to a penalty of fine or imprisonment. Additional copies of these posters are available to chemical plants upon application to the Department of Labor and Industry, Harrisburg, Pa.

Rulings on Minors in Wholesale Liquor Stores

Children under eighteen years of age are prohiibted from certain duties in wholesale liquor stores and in clubs, hotels or other places where alcoholic liquors are dispensed or stored, under a recent ruling of the Industrial Board. The ruling is as follows:

"Pursuant to the provisions of Section 5 of the Child Labor Act, May 13, 1915, P. L. 286, the following occupations are hereby determined and declared to be injurious to the health and morals of minors, under the age of eighteen years, and therefore unlawful for employers to permit any such minor to work therein:—

"Handling of case goods, barrelled goods, and other heavy materials in wholesale liquor stores.

"Any other occupation in wholesale liquor stores.

"Serving, handling or care of alcoholic liquors in clubs, hotels or other places where alcoholic liquors are dispensed, or stored."

Boy Employes on Rifle Ranges

Boys between the ages of sixteen and eighteen years may be employed as markers in the pits of rifle ranges under proper safeguards according to a ruling of the Industrial Board, which has

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decided that such work is, under proper conditions, not a dangerous occupation as intended in the Child Labor Law. Action on this question was taken following inquiries from rifle clubs in various sections of Pennsylvania.

Ruling on Boilers

Notices have been set by the Industrial Board to manufacturers, chief inspectors and general inspectors of steam boilers that a ruling makes mandatory that after January 1, of next year, every boiler installed in Pennsylvania must conform with the Boiler Code of the Industrial Board.

The ruling is as follows:—

"No boiler shall be admitted into Pennsylvania after January 1, 1918, which does not conform with the boiler standards of Pennsylvania."

Safety Devices Approved

Thirty-six additional safety devices have been awarded certificates of approval by the Industrial Board. Eighty-six devices for safety in industry have thus far been passed by the Industrial Board upon recommendation of the Committee of Approvals, appointed by the Board to investigate all devices submitted. The last safety devices approved bear certificates from No. 51 to No. 86 inclusive. The manufacturers of the devices and the devices approved are as follows:—

No. 51. The Frog Switch & Mfg. Co., Carlisle, Pa.—Swing Frame Grinder.
No. 52. Zeiller & Nagel, Brooklyn, N. Y.—Saw Guard, Designated as Exhibit No. 2.
No. 53. Zeiller & Nagel, Brooklyn, N. Y —Saw Guard, Designated as Exhibit No. 3.
No. 54. Zeiller & Nagel, Brooklyn, N. Y.—Shaper Guard.
No. 55. Pyrene Mfg. Co., Philadelphia, Pa.—Pyrene Fire Extinguisher.
No. 56. Reiber-Gibbs Co., 2516 Smallman St., Pittsburgh, Pa.—Reiber Safety Reading Device for Boiler Water Gauges.
No. 57. Reiber-Gibbs Co., 2516 Smallman St., Pittsburgh, Pa.—Safety First Gauge Glass Protector.
No. 58. Mr. A. S. Flowers, Mt. Joy, Pa.—Fire and Panic Door Opening Device.
No. 59. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Circular Cover for Wood Drill.
No. 60. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Flexible Roller Guard for Rear of Wood Planer.
No. 61. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Guard for Cross Cut Saw.
No. 62. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Guard for Rip Saw.
No. 63. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Small Safety Soldering Ladle.
No. 64. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Safety Roller Feed Punch Press.

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No. 65. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Automatic Feed and Discharge.
No. 66. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Safety Belt for Window Cleaners.
No. 67. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Safety Guard for Gang Press.
No. 68. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Safety Acid Jugs.
No. 69. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Wire Guard for Large Glass Reflectors.
No. 70. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Suction Device for Lifting Punchings.
No. 71. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Wooden Tongs for High Voltage Fuses.
No. 72. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Safety Screw Drivers.
No. 73. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Safety Suction Device for Handling Sheet Metal.
No. 74. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.—Five Different Kinds of Safety Devices for Placing or removing Punchings on Punch Press.
No. 75. General Electric Co., Philadelphia, Pa.—Safety First, Truck Type, Alternating Current Switchboard Panel Unit.
No. 76. General Electric Co., Philadelphia, Pa.—Three-wire Steel Switching Cabinet.
No. 77. General Electric Co., Philadelphia, Pa.—Safety First Switch Panel.
No. 78. General Electric Co., Philadelphia, Pa.—Switch Unit.
No. 79. General Electric Co., Philadelphia, Pa.—Enclosed Safety First Line Switch.
No. 80. Positive Lock Bolt Co., 805-807 Walnut St., Philadelphia, Pa.—Positive Lock Bolt.
No. 81. Mason Safety Tread Co., 1836 Euclid Avenue, Cleveland, Ohio.—Mason Safety Tread, Lead Filled.
No. 82. Mason Safety Tread Co., 1836 Euclid Avenue, Cleveland, Ohio.—Mason Safety Tread-Carborundum Filled.
No. 83. Mason Safety Tread Co., 1836 Euclid Avenue, Cleveland, Ohio.—Mason Black Diamond Safety Tread.
No. 84. Mason Safety Tread Co., 1836 Euclid Avenue, Cleveland, Ohio.—Mason Non-Slipping Ladder Shoes.
No. 85. Krantz Mfg. Co., Brooklyn, N. Y.—Krantz Auto-Lock Panel.
No. 86. Sargent Company, New Haven, Conn.—Sargent Panic Bolt.

SOCIAL AND INDUSTRIAL INSURANCES AS DISCUSSED BY COMMISSIONER JOHN PRICE JACKSON BEFORE LABOR'S OPEN FORUM AT HARRISBURG, FEBRUARY 25, 1917.

The term compulsory social insurance, when used in discussion, is quite commonly intended to cover workmen's accident compensation, widows' pensions, old age pensions, sickness insurance, maternity insurance, occupational disease compensation, unemployment

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insurance, or other systems for protecting the worker in the times of adversity. In some cases, where nations have adopted such systems, the cost is borne by the whole people through the government, in other cases the burden has been distributed in a variety of proportions between government, employes and employer.

Accident compensation insurance has been accepted largely throughout the world as just and worth while. The administrative costs, as in Pennsylvania's system, are usually assumed by the government, while the benefits, medical, and allied expenses are assessed upon the employer as being a proper charge upon the cost of production. A year's experience in Pennsylvania under the working of such a system has not only resulted in medical attention and financial aid to tens of thousands of injured persons and in substancial financial assistance to widows and orphans, but has also aroused an earnest crusade among our people to *reduce* accidents, such as could be obtained in no other way. Undoubtedly under the impetus of this humane crusade, the reduction of unnecessary human waste will bring added wealth to the Commonwealth many times in excess of the entire cost of the system.

Occupational Disease Compensation

Truly occupational diseases are as much injuries to the body due to industry as are industrial accidents and, therefore, if it is just and desirable that one of these two classes of injuries be compensated, it is equally right that the other should be similarly treated. The difficulty seems to be that it is always hard to determine whether or not the disease was due to the injury or to other causes. The experience of England in Europe and of Massachusetts in this country, however, is such as to indicate that this difficulty can be overcome, and that occupational disease compensation proves as great an impetus toward improvement of health conditions in the work-place as does accident compensation tend to improve safety methods.

General sickness insurance for those receiving less than a specified wage, where the government, the employer, and the employes join in bearing the expenses, is in force in some countries. In Germany the system is expensive and cumbersome and can scarcely be declared wholly satisfactory. It, moreover, carries with it the onerous burden of tending to cause a person to exaggerate his aches and pains, rather than to fight them. Nevertheless, there are many favorable reports upon such systems, and if they can be so developed as to improve materially our health conditions they would prove of material value to us.

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Other Insurances

We are entirely too lacking in the respect and merited attention due to our old people who have finished the battle of active life. China, in spite of her formerly backward government, puts us to shame in this respect. Those who are destitute, through misfortune or lack of foresight, are often forced to live on inadequate crumbs and in ragged raiment, or to crowd into poor houses under a stigma which makes charity blush. We can scarcely go too far to honor and care for our old people. It is possible that old age pensions tried in other countries, and by some corporations in this country, would bring self-respect and happiness to the declining days of these people. It is not likely that the size of the pension which would be given would be of such proportion as to cause any of us in virile, active life, to be less industrious or less anxious to lay aside a comfortable competence for our later years.

In spite of the croakers, we Pennsylvanians are proud that we have established the widow's pension. The only regret we have is that it is being put into full force and operation so slowly. To give the widow a chance to bring up, feed, and clothe her children properly, rather than to force her to neglect and ill nurture them, is not only humane but a measure of public economy.

In certain other countries, where many married women work in the mills, it has been found wise to provide by law for their release from work and to give them care and assistance during the child-birth period. In this country fewer married women have been so employed,—though the number is apparently growing,—and this problem of public care has not been thrust upon us. It is, however, now being considerably discussed.

Compulsory unemployment insurance is being given an extensive and seemingly successful trial in England. In several of the largest established trades the workmen receives, after a limited waiting during unemployment, the benefits of an unemployment insurance. At first a small percentage of shirkers took such unfair advantage by not trying to find employment, that the experiment almost failed. This difficulty was remedied by combining the administration with an effective organization of free governmental employment agencies. Now when the man loses employment, the agency immediately hunts a new job for him. If this is one in his own trade, and within the rules as to distance and conditions, it serves as a stop to further benefits whether the position is accepted or not. The agency not only serves to make the unemployment insurance system workable, but is most useful in aiding men in its district to find positions quickly, for which they are best fitted, with resultant reduction of human waste and raised efficiency. Trades unions are strongly

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backing this system and it seems to have the approval of employers and public officials.

Protection Rather Than Charity

This group of collective activities, touched upon herein, aim directly to improve the opportunity of a man to support himself and his family, to prepare for the "rainy day," and to receive as his due, rather than as charity, support needel by reason of old age, and vocational accident or sickness. The broader purpose is to eliminate unnecessary human waste and suffering. Undoubtedly, the teachings of the Christian religion, particularly as to the brotherhood of man, have quickened the consciences of nations and communities to search for such methods as will reduce suffering and want. Where they have been tried, however, it has been in the belief that they would not only be humane, but would also tend to improve the effectiveness of and conserve human labor; indications tend to show that a fair measure of success has been attained to this end.

In discussing collective activities of this order, there are many human constituents to consider. Thus, when our forefathers came to this country, they left lands of comparative comfort and plenty to brave the rigors of an unknown wilderness, in order that they might have liberty to think, to speak, to act, and to worship as seemed good to them. They gave forth the Declaration of Independence and offered their lives to throw off the rule from abroad that threatened that liberty. Danger lurks in any community action such as has been spoken of, in that it may, if thoughtlessly applied, destroy that liberty which was with such hardship won and which we so greatly prize.

American Initiative Should be Preserved

It has been said that greatest blessing of America is the self-reliance, independence, and initiative of the American citizen and that advances along the industrial social lines should be made, only after most careful study and deliberation, in order that those valuable characteristics may not be marred.

There are, however, without question, ways, possibly some among those suggested, modification and expression thereof, and entirely new proposals, whereby the nation, states, communities, employers, and employes can co-operatively get together to eliminate or greatly reduce the present terrific waste of human energy and unnecessary human suffering. without interfering with either our reasonable liberties or injuring our characters.

Most of this waste and suffering has come with an industrial system which has just grown, with heterogeneous parts, and but little direction and which is filled with astounding crudities and

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bungling, in spite of its might, and in many ways, wonderful performance. Our people are just awakening to the need of looking conditiions squarely in the face and just beginning to appreciate the powerful value of friendly co-operation among all of its constituents. In other words, we are just beginning to learn that, under our present conditions, many of our problems, dealt with individually, must be solved by the whole people or great units of the people working together in harmony.

This problem is laid before the Open Forum because in America, it is the people affected who are the rulers, and it is only by free discussion and thought among those rulers that wise solutions of such problems can be expected.

PROCEEDINGS OF INDUSTRIAL PHYSICIANS' CONFERENCE.

The large number of physicians engaged in industrial practice as well as others interested in this subject may obtain a copy of the Proceedings of the Fourth Conference of Industrial Physicians which was held at the Capitol on February 16, 1917.

This conference was attended by over two hundred and fifty persons from Pennsylvania and neighboring states. The subjects considered were of interest to plant managers, welfare managers, and to safety men, as well as to physicians for whom these conferences are primarily intended.

In as much as the publication of the Proceedings of the Fourth Annual Welfare and Efficiency Conference has so recently occupied two issues of the Monthly Bulletin of this Department, it has been deemed inadvisable to publish the complete February conference proceedings at the present time. The Pennsylvania Medical Journal has, however, the work being done in this branch of medicine which is so closely interwoven with industry, and has publishel in its June issue the proceedings of this Conference in full. The Department of Labor and Industry has obtained a number of reprints of these proceedings and will distribute them without cost to any person interested in this phase of industrial conservation.

Intended originally only for physicians, these conferences have proved to be of general importance. And the papers, far from being strictly technical, are as instructive and interesting to the average business man as to the physician. It is to be regretted that these papers could not be published in full in the Bulletin. The following program, however, shows the scope of the subjects covered and also

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demonstrates that these subjects were presented by men of national prominence:.

The Relation of the Physician to the Compensation Law and its Proposed Amendments, Dr. William Estes, Chairman, Committee on Workmen's Compensation, Medical Society of Pennsylvania, South Bethlehem, Pa.

Discussion opened by Dr. Charles A. E. Codman, President, Medical Society of Pennsylvania.

Compensation for Industrial Diseases. Dr. Frederick L. Hoffman, Statistician, Prudential Life Insurance Co., Newark, N. J.

Discussion opened by Dr. Alfred Stengel, Professor of Medicine, University of Pennsylvania, Philadelphia, Pa.

The Dawn of a New Surgical Era—The Carrel-Dakin Treatment of Infected Wounds, Dr. William O'Neill Sherman, Chief Surgeon, Carnegie Steel Company, Pittsburgh, Pa.

Discussion opened by Dr. J. S. Lawrence, Johns Hopkins University, Baltimore, Md.

Treatment of Fractures of the Long Bones from the Viewpoint of Function, Dr. Edward Martin,. Professor of Surgery, University of Pennsylvania, Philadelphia, Pa.

Discussion opened by Dr. John B. Lowman, Chief Surgeon, Cambria Steel Co., Johnstown, Pa.

National Standards for First Aid, Dr. Joseph C. Bloodgood, Associate Professor, Clinical Surgery, Johns Hopkins University, Baltimore, Md.

The presentation of the program at this time is for the purpose of allowing anyone interested in one or more of these topics an opportunity to obtain a copy of the papers presented together with the discussions upon them. A supply of reprints of these proceedings is available and until this supply is exhausted they will be sent to anyone indicating a desire to receive them. Address all requests for these publications to the Division of Industrial Hygiene and Engineering, Department of Labor and Industry, Kunkel Building, Harrisburg, Pa.

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